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A THRILLING PUBLICATION

FANTASTIC STORY MAGAZINE

FEATURING

THE EVENING STAR
By DAVID H. KELLER, M. D.

WITHIN THE PLANET
By WESLEY ARNOLD

VIA DEATH
By GORDON A. GILES

MIRACLE MEDICAL DISCOVERY BY FAMOUS SKIN DOCTOR GROWS HAIR ON BALD HEADS

Now! Medical scalp and hair specialist's KEMPOR formula actually can regrow new hair by carrying fresh, vital nourishment deep into starved hair roots!

Used successfully in his private practice on patients in all walks of life—now, for the first time this doctor's amazing formula is available for home use!

CLINICALLY TESTED AND PROVED — GUARANTEED ABSOLUTELY SAFE AND HARMLESS! Formula Used by Many Doctors Themselves!

90% of all cases of baldness can be benefitted — according to famous medical authorities

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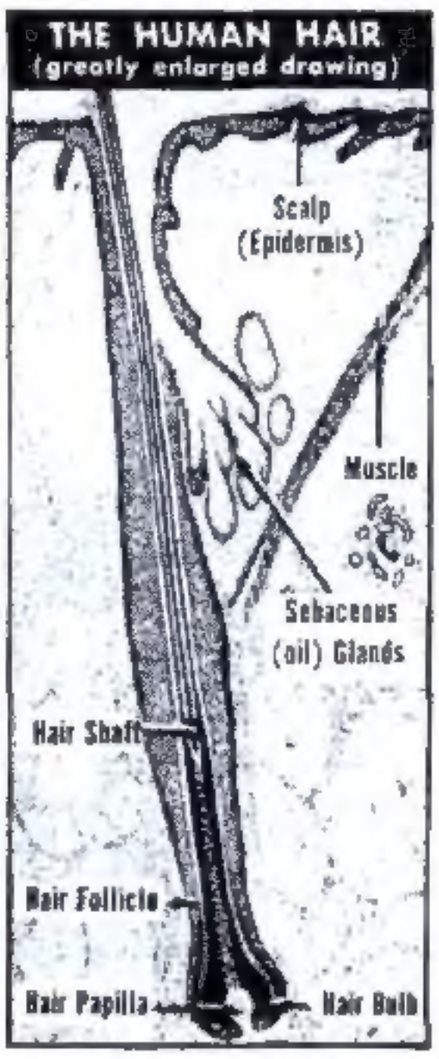
Use the formula (KEMPOR) that has been the noted skin doctor's closely guarded secret — tested and proved in his private practice!



At Last! A Way to End the Curse of Baldness!

Do you suffer the shame and embarrassment of excessive falling hair, bald spots, dandruff scales, itchy scalp? Is premature baldness making you look old before your time, robbing you of your rightful share of life and love? Does your bald head make you look too old for that better job, that bigger pay check?

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CASE 645 Physician, 45
Symptoms: Dry, irritated scalp. Excessive hair loss.
Result: "Excessive hair loss ceased entirely. *New hair growth replaced those which were formerly lost.*"

CASE 847 Housewife, 42
Symptoms: Considerable loss of hair *following permanent.* Hair came out in handfuls.
Result: *Hair loss ceased. A complete regrowth of hair occurred later!*

CASE 1206 Druggist, 26
Symptoms: *"Hereditory" premature baldness. Father largely bald at 25 years of age.*
Result: Scalp and hair clean. *No further unnatural hair loss since start of treatment.*

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Only KEMPOR is the perfected formula of the famous scalp and hair doctor who made this revolutionary scientific discovery!

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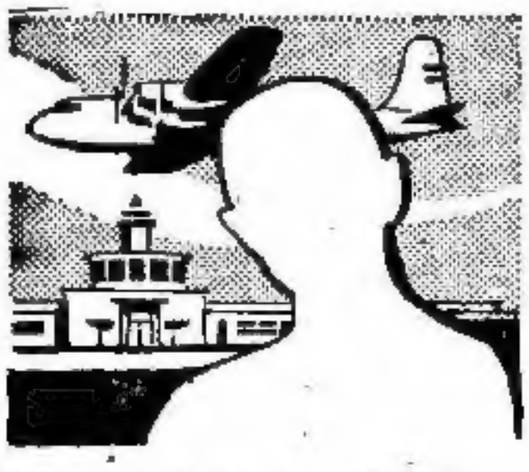

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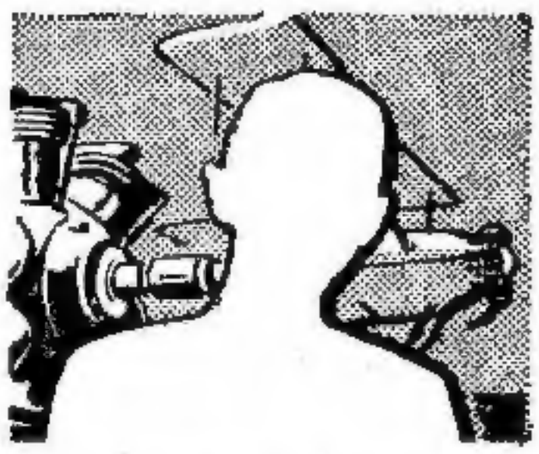

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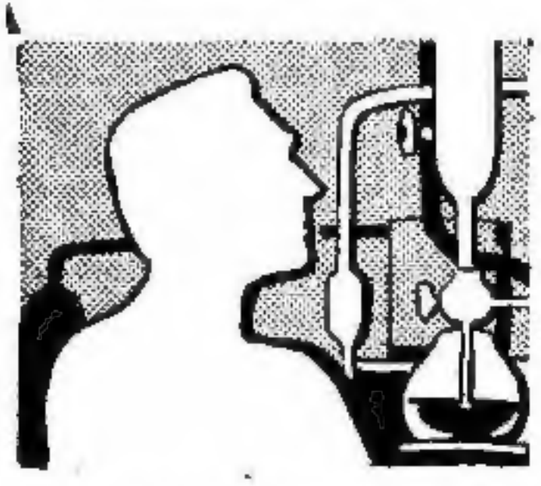

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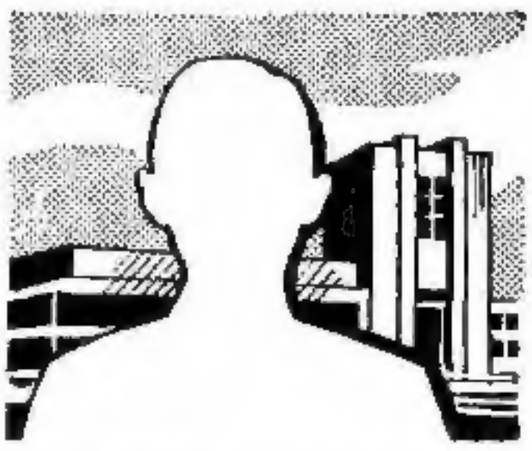
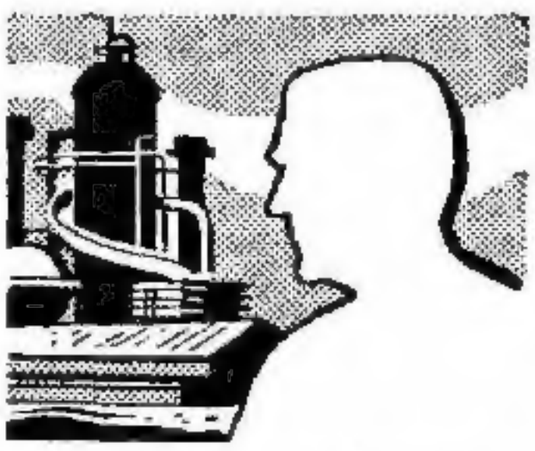


ENGINEER in charge of a famous company's engineering laboratory.



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FANTASTIC STORY MAGAZINE

Vol. 3, No. 2 A THRILLING PUBLICATION WINTER, 1952

A Classic Novel

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SAMUEL MINES, *Editor*

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In 1946 only 6,000 TV sets sold. In 1950 over 5,000,000. By 1954, 25,000,000 TV sets will be in use, according to estimates. Over 100 TV Stations are operating in 35 states. Authorities predict there will be 1,000 TV Stations. This means new jobs, more jobs, good pay for qualified men.

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I TRAINED THESE MEN

"After graduating, worked for servicing shop. Now Chief Engineer of three Police Radio Stations."—B. W. DINWIDDIE, Jacksonville, Illinois.

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"I accepted a position as Radio and Television Technician . . . was promoted to manager of Television Service and Installation."—L. HAUGER, San Bruno, California.

"Have my own shop. An authorized serviceman for five manufacturers and do servicing for 7 dealers."—P. MILLER, Maurer, O.

"Four years ago, a bookkeeper on a hand-to-mouth salary, am now a Radio Engineer ABC network."—N. H. WARD, Ridgefield Park, New Jersey.

"When I enrolled, had no idea it would be so easy to learn. Have equipped my shop out of spare time earnings. I am clearing about $40 to $50 a month."—J. D. KNIGHT, Denison, Tex.

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A DEPARTMENT WHERE SCIENCE FICTION READERS AND THE EDITOR MEET

THESE are portentous times—as which times are not?—and the moguls are once again asking the citizenry for self-sacrifice and taxes and sober behaviour and taxes and hard work and taxes and no self-indulgence and taxes and taxes. What with threats of global war and worse and the collapse of the second crusade to end all wars and all dictatorships it hardly seems like a time for frivolous comment.

Yet this is nothing new to our unhappy globe. Just a few short years ago, all of Europe was cowering in fear of a swaggering little dictator named Napoleon. And before him were Attila and Ghengis Khan and Caesar and Alexander and too many others. And the times have always been gloomy and fear-ridden with some threat or other and always the prophets have been crying doom and exhorting the multitudes to stop enjoying themselves and start being unhappy and scared and worried and work themselves to death. There are people who are unable to be happy and it makes them furious to see anyone else smile.

Work and Play

However, if you find yourself cold to dire warnings and allergic to the philosophy of all work and no play, be of good cheer. Science, the belated handmaiden of imagination, comes tripping to your side. Science has decided there is truth in the old adage and that if you cannot properly balance your work and play you are neuropsychiatric. Treatments begun at a Veterans' Hospital on Long Island have demonstrated that the cure for some types of mental illness lies in teaching the patient to work and play. There are deep instincts in us which are outraged by harsh disciplines imposed from above and neuroses or insanity is the refuge into which the mind flees to escape from tyranny.

A lot of science-fiction has been written around the theme that in the Utopia of the future, mankind will have so little to do that he will not have the discipline of hard work and danger, so will degenerate into a flabby, self-indulged, useless blob. This is a theory upon which we have long gazed with a jaundiced eye.

At its self-indulgent best, life is a harsh, tragic business, with hours of tears for every one of happiness. Hardships, tragedies and self-sacrifice break millions of spirits and minds to every one ruined by too much of the good things of life. The plain truth is that there have never been enough of the good things of life except for a tiny few and the rest could stand quite a dose of them before they started to degenerate.

Fun for All

We would like to initiate a small movement for less self-sacrifice and more fun for everyone. This is right in line with science-fiction, which keeps the goal of a better world always right in front. Escape reverie? Not necessarily. It's a change of attitude from negative to positive. And if the psychologists are correct, it might be enough to change the tenor of our times.

To the faithful, who bow three times a day to the Mecca of Moscow, science-fiction is blasphemous nonsense because it fails to recognize that life is real, life is earnest—and very grim. Well the only answer to that is "whose life?" The comrades, it seems to us, need a release from the insupportable strain they are under even worse than we do. And perhaps a shot of science-fiction is just what the doctor ordered for certain megalomaniacs who can't rest until they've shoved their theories down your unwilling throat. Might make them see

(Continued on page 145)

KNOWLEDGE
THAT HAS
ENDURED WITH THE
PYRAMIDS

A SECRET METHOD FOR THE MASTERY OF LIFE

WHENCE came the knowledge that built the Pyramids and the mighty Temples of the Pharaohs? Civilization began in the Nile Valley centuries ago. Where did its first builders acquire their astounding wisdom that started man on his upward climb? Beginning with naught they overcame nature's forces and gave the world its first sciences and arts. Did their knowledge come from a race now submerged beneath the sea, or were they touched with Infinite inspiration? From what concealed source came the wisdom that produced such characters as Amenhotep IV, Leonardo da Vinci, Isaac Newton, and a host of others?

Today it is known that they discovered and learned to interpret certain *Secret Methods* for the development of their inner power of mind. They learned to command the inner forces within their own beings, and to master life. This secret art of living has been preserved and handed down throughout the ages. Today it is extended to those who dare to use its profound principles to meet and solve the problems of life in these complex times.

AMENHOTEP IV
Founder of Egypt's
Mystery Schools

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Has life brought you that personal satisfaction, the sense of achievement and happiness that you desire? If not, it is your duty to yourself to learn about this rational method of applying natural laws for the mastery of life. To the thoughtful person it is obvious that everyone cannot be entrusted with an intimate knowledge of the mysteries of life, for everyone is not capable of properly using it. But if you are one of those possessed of a true desire to forge ahead and wish to make use of the subtle influences of life, the Rosicrucians (not a religious organization) will send you A Sealed Book of explanation without obligation. This Sealed Book tells how you, in the privacy of your own home, without interference with your personal affairs or manner of living, may receive these secret teachings. Not weird or strange practices, but a rational application of the basic laws of life. Use the coupon, and obtain your complimentary copy.

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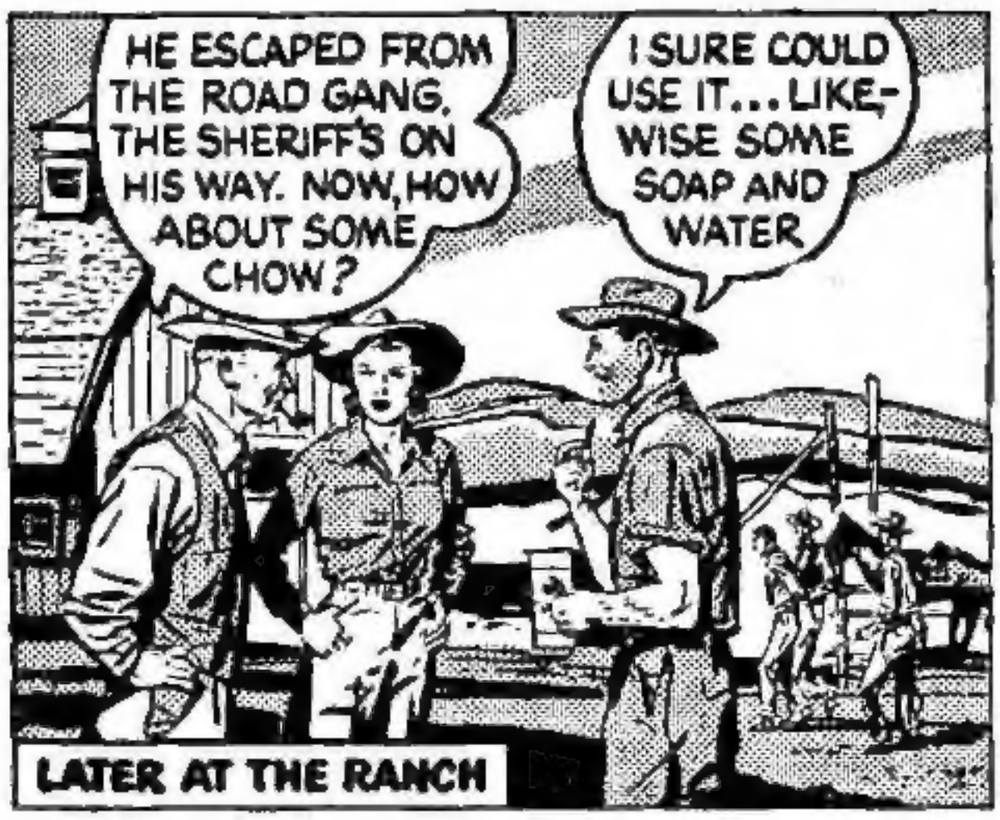
CHUCK HEARD A SCREAM AND THEN...

HOPELESSLY LOST IN THE RUGGED CANYON COUNTRY, DIANE BLAIR WISHES SHE'D TAKEN MORE SERIOUSLY THE "DUDE RANCH" RULES AGAINST RIDING ALONE... AND THEN...

ECHOING UP A NEARBY DRAW, HER CRY REACHES A YOUNG GEOLOGIST


HE ESCAPED FROM THE ROAD GANG. THE SHERIFF'S ON HIS WAY. NOW, HOW ABOUT SOME CHOW?
I SURE COULD USE IT... LIKE-WISE SOME SOAP AND WATER
LATER AT THE RANCH

WHEN IT COMES TO SHAVING QUICKLY AND EASILY AT A SAVING, YOU CAN'T BEAT THIN GILLETTES. THEY FAR OUTSELL ALL OTHER LOW-PRICED BLADES BECAUSE THEY'RE KEENER AND LAST LONGER. THIN GILLETTES FIT YOUR GILLETTE RAZOR EXACTLY, SO THEY NEVER NICK OR SCRAPE. ASK FOR THIN GILLETTES
THIN Gillette 10 BLADES
10-25¢
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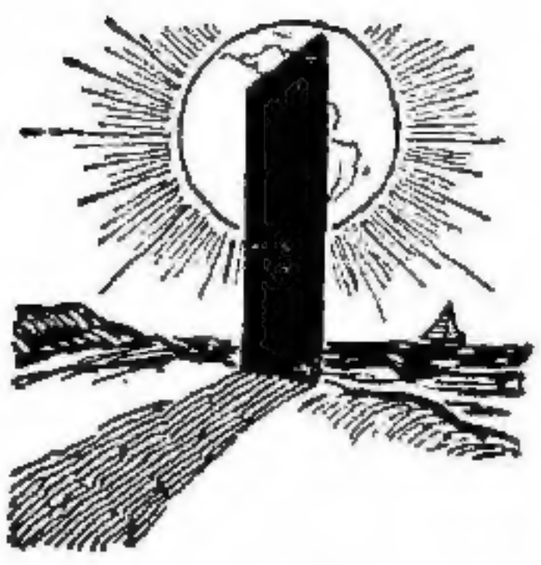
TEN-BLADE PACKAGE HAS COMPARTMENT FOR USED BLADES

A Word About the Works of—

CHARLES FORT:
the disciple of disbelief



IT HAS been said that no truly complete understanding of science-fiction is possible without at least a nodding acquaintance with the works of Charles Fort. In a sense, Fort was the idealization of a scientist, for he accepted nothing at its apparent face value and was eternally skeptical of all "facts."

To Tiffany Thayer, president of the Fortean Society and himself not without some reputation in English letters, Charles Fort was all things to all men.

Thayer may be allowed some natural bias, but it probably comes close to un-Fortean intolerance for him to say, as he does, if you do not consider Fort's books great, "your findings are at least as much confession as indictment."

So much heat on the part of Forteans indicates a defensive attitude, yet a writer who can inspire such feverish loyalty in his disciples is worthy of more than a cursory inspection.

"Nothing Final . . ."

"He was one sane man in a mad, mad world," says Mr. Thayer. His sanity apparently consisted of complete, invariable and mocking skepticism.

"Firmly to believe is to impede development." Fort wrote in THE BOOK OF THE DAMNED. "Nothing has ever been finally found out. Because there is nothing final to find out. It's like looking for a needle that no one ever lost in a haystack that never was. . . ."

This last sentence is good stf. It reminds one of the semantics of Van Vogt and the bewildering paradoxes of a George O. Smith time travel story. However, it is a truism that it is easy to question, the real test coming when you are asked to substitute something constructive for what you have demolished. It may be Fort's failure to do so which is directly responsible for his decline.

Weird Events

Thayer condemns those who criticize Fort's "facts" as being chiefly gleanings from daily newspapers, such news reports being notoriously inaccurate, distorted and misleading. Yet in spite of Thayer's objection, the truth is that Fort did draw a large part of his material from newspaper reports and even if you add to them his other sources, such as scientific journals, the authenticity of his material is still open to question.

They are still alleged eye-witness reports of unusual phenomena, or hearsay, and mostly under conditions in which scientific accuracy of observation would be impossible. Despite denials, the greater part of Fort's writings seem to be a collection of weird and wonderful events such as rains of frogs from the sky, showers of black rain, red rain, pumice, slag, blood, jelly, fish or what have you.

A Great Temptation

The temptation to erect a theological structure upon such a basis of weird and wonderful events must have been enormous. It is to Fort's credit that he resisted and maintained to the end his own attitude of disbelief towards all things, including his own findings.

Much smoke needs clearing before the works of Charles Fort are finally evaluated. Stf fans should read at least something of his books so that they may understand the references to his works which occasionally crop up.

—The Editor

The EVENING STAR

A Novel by DAVID H. KELLER, M. D.

I

TELL him I'm busy—he'll have to come back." The little white-haired man spoke without turning his head, so intensely interested was he in the vision in the telescope.

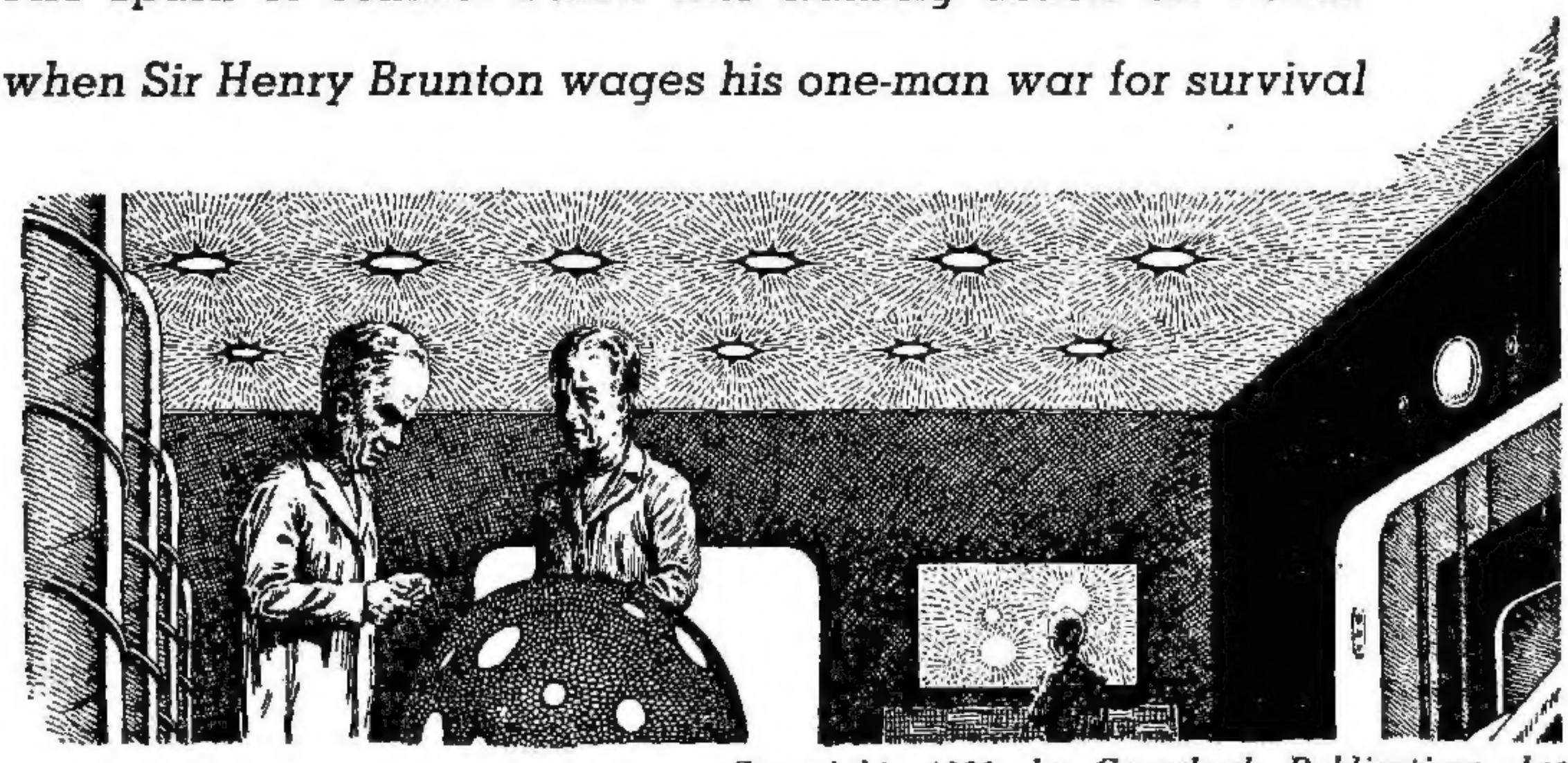
The assistant scratched his head in perplexity. "But he seems bound to see you," he stammered at last.

"Tell him I'll attend to him tomorrow."

The young man left the observatory and the little man, in perfect silence, gave his undivided attention to the stars.

But his solitude was again broken by the sound of a hearty greeting. Be-

The spark of conflict bursts into flaming action on Venus when Sir Henry Brunton wages his one-man war for survival



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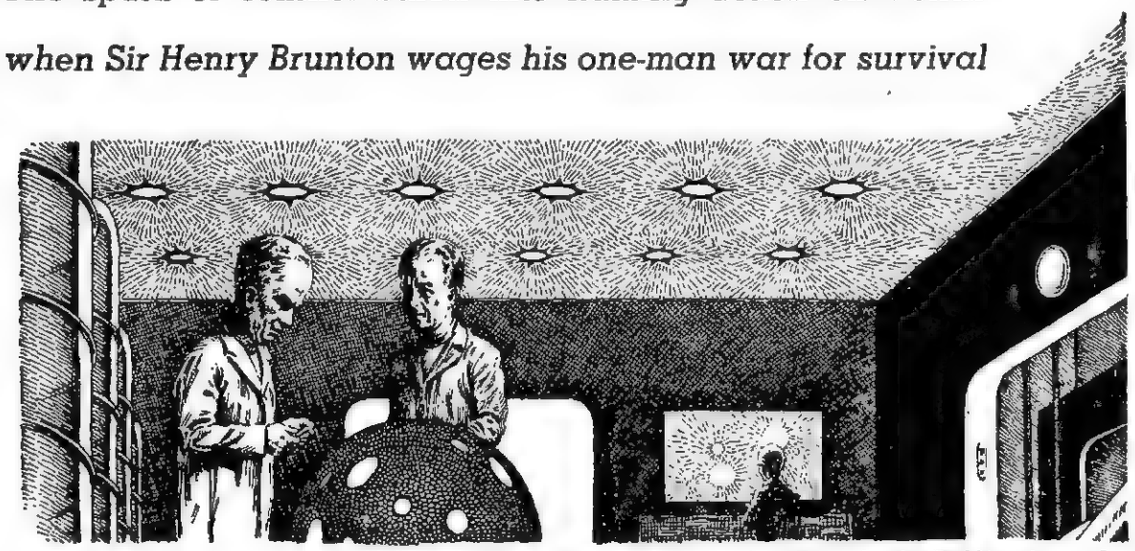
The EVENING STAR

A Novel by DAVID H. KELLER, M. D.

The spark of conflict bursts into flaming action on Venus when Sir Henry Brunton wages his one-man war for survival



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I

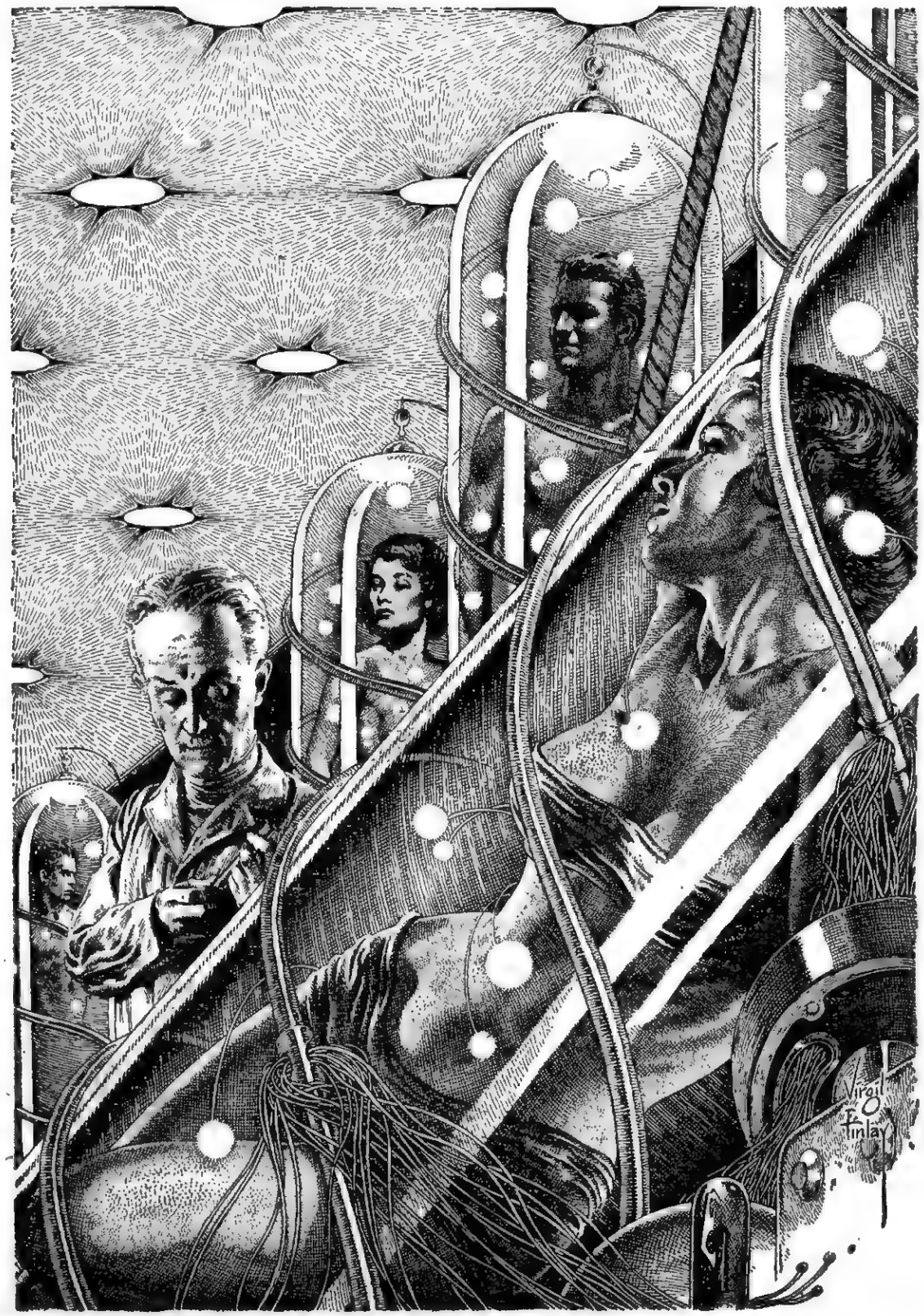
TELL him I'm busy—he'll have to come back." The little white-haired man spoke without turning his head, so intensely interested was he in the vision in the telescope.

The assistant scratched his head in perplexity. "But he seems bound to see you," he stammered at last.

"Tell him I'll attend to him tomorrow."

The young man left the observatory and the little man, in perfect silence, gave his undivided attention to the stars.

But his solitude was again broken by the sound of a hearty greeting. Be-



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fore he had time to turn around with a reprimand, strong arms had seized him and swept him from his seat, lifting him up in the air. Angrily he turned on his assailant—but his frown changed to a look of astonishment, then a smile.

"Harry, dear lad!" he cried. "Where did you come from? I haven't heard of you for so long that I thought you were lost for good in some wilderness."

"So, you're really glad to see me, Percy?" asked Sir Harry Brunton. "You didn't seem so when you told your assistant I could wait till tomorrow. My word, think of it! Not seeing you for years and then having to wait till tomorrow! After all the good times we had at the old University too."

AND then the big man tenderly led the little man to a comfortable chair, drew another chair close, lit his briar pipe, and between puffs, fairly beamed at his friend.

"It's awfully good to see you again, Harry," whispered the little old man. "I suppose you've been into all kinds of devilment since we last met?"

"Hardly that—but I have knocked around a bit! I suppose you've sowed a fair amount of wild oats yourself?"

The astronomer laughed. "Not so many, Harry. You know how I was at the University—always up at night looking at the pretties in the skies and then so sleepy the next day that you had to help me with my lessons. Well, after I graduated I put more than half of the fortune I inherited into this observatory in Arizona.

"I would rather have stayed in England but the climatic conditions were not good enough. So I came here—and here I have been for the last thirty years. I have been spending the income from the other half of my fortune and a fair part of the principal in trying to prove my one thesis—namely, *that there is life on other worlds than ours.*"

"And have you been here all of thirty years?"

"Not quite that. Now and then I go down to Flagstaff and less often I attend some scientific meeting and read a paper on my findings—but I suppose that ninety-nine percent of the time I've been right at this eyepiece."

"I envy you, Percy. I've been to Australia and Gobi and two years in Greenland and some in Central Africa but you've been to the furthermost parts of the universe."

Percy Whitland sighed and closed his eyes as he murmured, "Not the furthermost parts, Harry. I have seen just a corner of space. Our cosmos is so vast that the highest-powered telescope can see only an infinitesimal part of the whole."

"My word! I can't even imagine distances so great. Listen, lad! I've made a long trip to talk to you about things out there"—he waved his hand toward the star-studded dome— "but perhaps I've come to the wrong man. Perhaps you'll just laugh at me?"

"I'd never laugh at you, Harry," said the little man gently.

"But you know so much more than I do!"

"And you know lots that I don't. Why not speak up? The night is yours."

"All right. But first a few questions. Do you really think that anywhere out there there is organic life of any kind?"

"I wish I could answer that! Do you recall Giordano Bruno? There was a man! He had the courage in sixteen hundred to say he believed there were other worlds than ours, each with some form of life on it. They tried to make him retract but he held fast, and they burned him at the stake.

"They put poor old Galileo in prison for daring to say that the earth moved around the sun and at last, unable to stand the tortures of solitude any longer, he made a public retraction. However, even as he knelt and acknowledged the error of his former statement, he murmured under his breath, *'and yet it does move.'*

"Those were sorry days for astronomers. Times are better now but even

in the last thirty years I've been sneered at when I've publicly made the statement that there was scientific proof of life on Mars. I've been laughed at as an utter fool when I suggested that parts of Venus could be inhabited by human beings."

"But do you think so? Truly?"

"Yes, of course! But the idea that every little planet is a possible home of living structures is not accepted by most modern astronomers.

"When I talk about our planets I feel at home. I'm among neighbors, old friends. Good old Neptune and Mercury are just like nearby towns. I can study the canals on Mars and do all kinds of dreaming about Venus. And yet, when I seriously approach the question as to whether there is life on our nearest neighbors, I waver between desire and hard facts.

"It is so hot on the surface of Mercury that liquids boil there, while it is so cold on Neptune that everything is frozen hard. Adams and St. John believe that the atmosphere around Mars contains only fifteen percent of the oxygen that our earthly atmosphere contains. Venus has probably one percent. The question is—can life exist under such conditions?"

"But what do *you* think?"

"As an astronomer I think it doubtful. As a man I hope that Mars and also Venus hold beings similar in some respects to us. I have tried for thirty years to prove that this is so. Now, just between us two, I say that I do not know."

"How would you like to make sure?"

"How could I do that?"

"By going to Venus!"

"Excuse me for a few minutes," exclaimed Whitland, and turned away.

FOR long minutes he worked with his telescope. Then he motioned to Sir Harry to take his place at the eyepiece. The anthropologist saw a bright silver crescent that seemed to be enveloped in a white mist.

"How near is it?" whispered the astronomer.

"Near? I could hit it with a rifle bullet."

"Think so? That's Venus. It's getting as close to earth as it ever does and that means that when it comes to inferior conjunction* it will be twenty six million miles away from us. That isn't far, of course, as stellar distances go, but at the same time it's a tidy little stretch.

*Inferior conjunction in this case occurs when Venus is between the earth and sun.

Space Opera

FAITHFUL readers will recognize, in THE EVENING STAR, the celebrated sequel to its celebrated predecessor, THE CONQUERORS. Dr. Keller himself thought THE EVENING STAR surpassed the original story and whether he be right or optimistic we leave to you.

There is a fascination about sequels. Having grown to know a family of characters and seen them battle out their differences, human curiosity impels us to know more about them and see what happened next. So that the more human of us welcome sequels eagerly.

In any case we welcome THE EVENING STAR because it is an excellent example of a period in stf writing when the space opera was beginning to shed its swaddling clothes, when a ray gun and a rocket ship were alone not enough and such elements crept in as plot sophistication, irony, drama and humor. So have at it!

—The Editor

"I understand that men ultimately expect to travel through the air at the rate of six hundred miles an hour. Going that fast, it would take eighteen hundred and five days or five and one-half years of constant travel to arrive at Venus. Yet you say it seems so near that you could hit it with a rifle bullet."

"Do you suppose man will ever conquer the problems of space, just as they've gone down under the ocean in submarines and into the air in planes?"

"You come to my rooms, Harry. I can answer that question better there. I'll turn the work of the night over to one of my assistants. They thrive on responsibility. My, but it's good to see you!"

Slowly he led the way out of the room which housed the enormous telescope. Walking, he measured barely four and a half feet in height. By nature a small person he had been deformed by tuberculosis of the spine in childhood. He was a hunchback. Brunton was shocked to see the ravages time had made on that harassed body. The anthropologist, over six feet tall and in glorious health for his age, seemed by comparison to belong to a race of supermen.

Percy Whitland led the way down to the rooms under the observatory. For years these had constituted his only home. Here he had studied and dreamed and longed for something to happen that would confirm his theory of the existence of life on other worlds. In this solitary building he had lived a life apart from the world, having as companions only a few young visionaries who dared to share his dreams. In these rooms he had silently fought discouragement and disease.

He was growing old now but although still unsuccessful he was undismayed. The more his body withered the more bravely he used his eyes and his intellect in wresting from the universe its many secrets. Yet all he had accomplished was nothing compared to the mighty mysteries which lay just beyond his grasp.

AS SIR HARRY BRUNTON walked behind the shrunken body of his former college mate he caught a glimpse of the struggle of all those years, of the silent heroism that had made the conflict endurable—and he saw more plainly than ever that only the mind of man matters, only the soul has a life that is worthwhile.

Whitland entered a large room and paused. It was a library, filled from the floor to ceiling with books of every size and description. A central table held more books. They overflowed the shelves and cluttered up the floor and the chairs. There were maps, magazines and folios. The little man turned on his guest with justifiable pride.

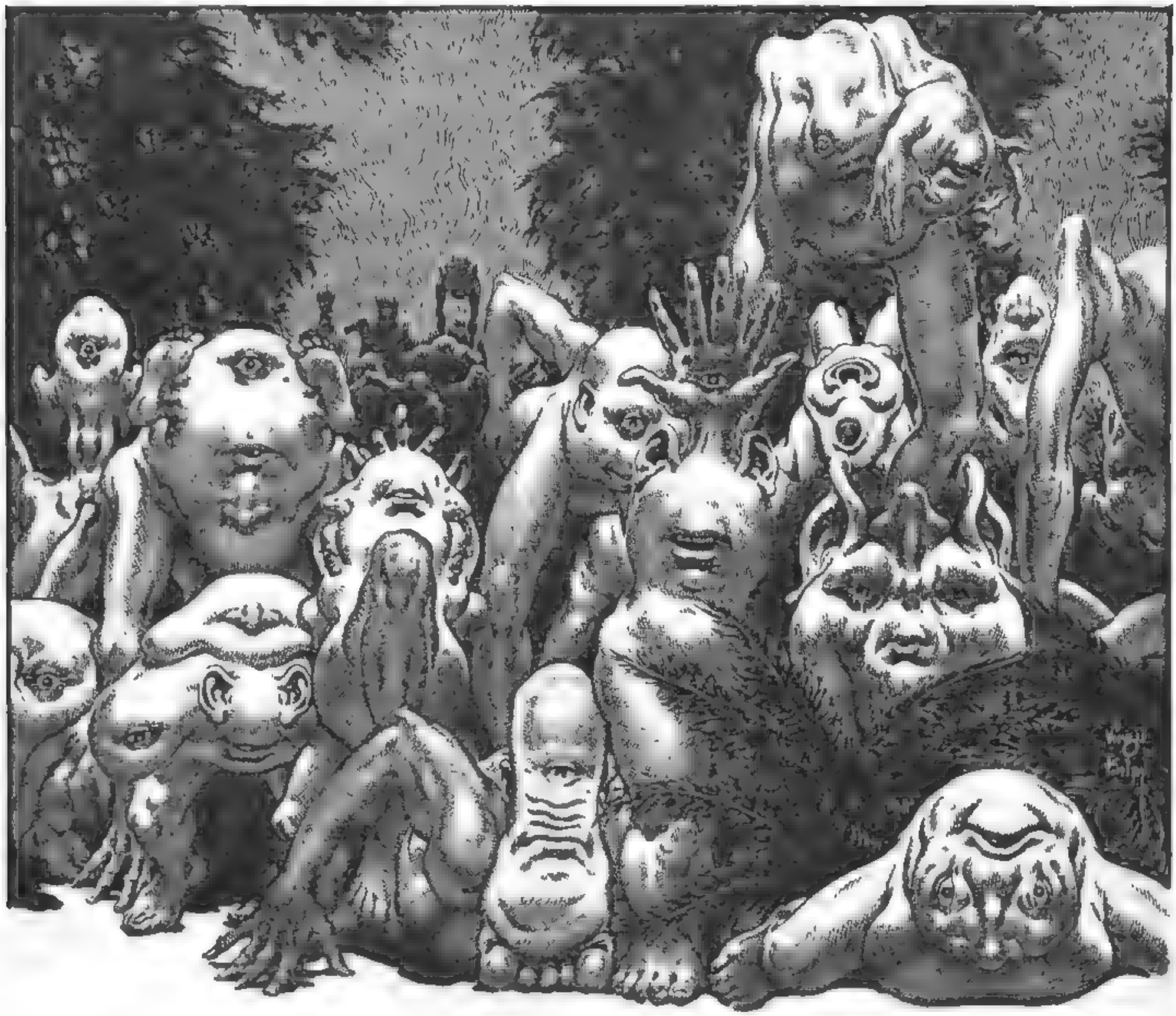
"Here is the finest private library on astronomy in the world. Men come to this room from all over just to read pages that can be seen nowhere else. This is my mental workshop. Here I check and recheck the work of the previous night. For thirty years I have not spared myself. No slave ever worked harder than I have.

"And why? Because I feel that each night may bring the final clue, and that clue might be lost forever were I to allow myself a moment's relaxation.

"Suppose I should find the answer to one of my questions at the end of another month? What if just a little more work would suffice? How terrible to think of death interrupting the labor of thirty years when I am just on the threshold of success, when I am passing from doubt to certainty! This is the thought that has driven me on.

"Not a cheerful thought, you'll say. Perhaps not, but it's one that I've never been able to shake off. Well, you're enough of a scientist to appreciate the value of such a collection of books. Even here in Arizona I've heard of your remarkable researches in anthropology. Suppose we go into the next room."

"My word!" exclaimed Sir Harry as he passed through the doorway. "You don't mean to tell me there's still another roomful of books?"



They were quite different from men and women on Earth

"Yes, but of an entirely different nature. In the first room there was nothing but cold science. But in this second room I have filled its shelves with the fantastic dreams, the stupendous hopes of men who, never satisfied that what they dreamed might happen, placed their visions on paper. Here are interplanetary tales dealing with other worlds than ours, and with life on these planets of every possible shape, size, color and deadliness.

"I have a standing order with booksellers all over the world to send me lists of all such novels or short stories. I have everything by Verne, Wells, Serviss, Gernsback and Otto Willi Gail, as well as a host of other writers about the unknown.

"And I not only buy these books but I read them all! Some are good and some are poor but they are all representative of a great truth. Underneath the hopelessness of it, behind the impossibility, the futility of it, lies this fact—mankind feels that someday *interplanetary travel may become possible!* There is always that hope.

"Less than twenty-five years ago men were laughing at Verne and Wells. Now they are reading about rocket-plane carriers and calmly discussing a flight to the moon. And here's another interesting point. In all these travels to distant stars, the adventurers from earth always find life—monstrous in

some respects but with the same mental reactions as human beings. Who would want to read a story of travel to a distant planet unless life were discovered there?

"The tired business man, the clerk and the scientist who buy the thrillers on the neswstands, all want to read about such adventures, because they want to think that these may someday become actual facts. That is the universal hope of the race. We have conquered the water and the air and now we want to explore the unlimited space that surrounds our earth.

"And that hope is my hope. I have approached it from the standpoint of pure science; but when I am tired, exhausted with my mathematical problems, I turn to these books and anaesthetize myself in their fancies."

SIR HARRY said sympathetically, "So! You really feel that life may exist somewhere else?"

"Yes, though it may not be life as we understand it. It may be animal, vegetable or mineral.

"Or we can look at it from another viewpoint. We know that the human ear is receptive only to certain sound vibrations. The human eye sees only a part of what there is to see, and so on. Suppose a race existed on some other planet with such a rate of vibration that neither the human eye nor the ear could receive them, yet in some way they were able to make themselves known to us?

"These and dozens of similar hypotheses have disturbed my waking moments and filled my dreams for years."

"And all these questions could be answered if explorers were able to conquer space?"

"Certainly!"

"Do you think that men will learn to do it?"

"Yes. At the rate they are advancing now, no one can tell what will happen a thousand, five thousand years from now."

"And you think the proof of other life can be furnished only by the actual journey to other worlds?"

"It seems so. Of course, the radio enthusiasts think that they could radio to Mars if only an interplanetary code could be devised. I've always thought that if there were beings alive on our planets, they would be trying as hard to communicate with us as we are with them, and that some day something might be accomplished. But when everything is said and done, the fact remains simply this: *No one can tell whether or not such life exists without going there to make actual observations.*"

The anthropologist drew his pipe from his pocket and started to fill it. "Let's go where we can be comfortable and talk a little. I have something to say to you."

"Certainly. I have a room that has nothing in it except a fireplace, two easy chairs and the greatest puzzle in the world."

"That sounds interesting."

Once in the room, Sir Harry Brunton looked around him. On a marble pedestal, near one wall, he saw a replica of the Venus de Milo.

"You're right, Percy. Woman is a puzzle that no man has ever solved. You must meet Charlotte. She loves me devotedly, and yet at times she makes me feel like wilted lettuce."

II

WHITLAND climbed into one of the great over-stuffed armchairs and carefully adjusted his crooked spine to one of the hollows in the upholstery.

"Who is Charlotte?" he asked.

"She's my wife; at least she would be if we could ever spend a few minutes in company with a preacher."

"You mean you're living together?"

"Not exactly, but—well, it's a long story. For the last year Charlotte and I have been living a most unusual life in most unusual surroundings and with

a very odd sort of people. We've spent a year with the Conquerors."

"That doesn't mean much to me."

"No doubt you are so interested in your stars that you forget to read the newspapers. The Conquerors are a race of dwarfs who claim that intellectually they are eighty thousand years in advance of the average human being. They drove the inhabitants out of five American states, and so far as I have been able to find out the people have never gone back. The British Government asked me to investigate the trouble and I did. I went to the base of the Conquerors and became one of them. It was an experience. Touch and go most of the time, but I rendered them a service and they promised not to destroy the human race. Some of our party were liberated, but I decided to remain there as a hostage. At the last moment Charlotte decided to stay with me.

"All things considered, it has been a remarkable experience, especially the part connected with Charlotte. Poor girl! In love with me and yet refusing to marry me unless I supplied a preacher, and at the same time, refusing to leave me.

"You'll undertsand better when you meet her. But she is just one of my problems. Those dwarfs had decided to wipe out our race. They had discovered the bacillus of a new disease and were going to sow it over the earth from their airplanes. I was fortunate enough to play a good poker game with them and they reversed their program. They have something else on their mind now, and until that is accomplished, they are going to let our race live on."

"Are you telling me the truth or just making up a science-fiction tale?"

"I don't blame you for thinking it's just another story, Percy, but it's all true, just as I have told it to you. That's why I'm here. The Conquerers are almost ready to send an expedition into space on a journey of exploration, and their first objective is Venus. They found out that you were an authority on astronomy. Of course their idea is that we Middle Men, as they call us, are very far behind them in all scientific knowledge except astronomy. They have lived beneath the surface of the earth for so long that they have neglected the study of the heavens. So they wanted an authority. At first they were going to kidnap you, but when I learned of it and realized that the man they wanted was the Percy Whitland I'd gone to college with, I entered into the discussion.

"I told them point blank that it wouldn't do them any good to kidnap you, that you would die rather than be driven. Then I suggested that they invite you to go with them, and offered to carry their invitation to you. At first they were suspicious, but when I showed them that they had in Charlotte the finest kind of hostage, they consented to let me make the trip. Of course, it was hard on Charlotte to stay there at Reelfoot Cave all by herself, but she's a true sport. So, there's the invitation. Will you join our expedition to Venus?"

The astronomer slowly dropped from the chair to the floor and walked over to his friend. He put one hand on Sir Harry's knee and with the other seized the Englishman's right hand in a convulsive grip.

"You're not teasing me, are you, Harry?" the little man pleaded. "You aren't just making fun of me, are you? Why, I would sell my soul for a chance to make a trip like that! Even if I died before I returned, what a wonderful end I would have, knowing that at last I had solved some of the questions that have been haunting me for over thirty years. You say these people are actually going to Venus? And want me to go along with them?

"Listen to me. I know something about Venus that I have not dared to speak of even to my pupils. I shall be glad to share my knowledge with the wise men you've mentioned if only they'll let me go with them—but of course, you are fooling!"

"It is all true. Of course, they haven't actually tried out their space machine yet, but I think it will work. They have been over a hundred years in designing it. They are really very brilliant, and they want you to go with them. And I am going too, Percy, to take care of you and Charlotte, and see that nothing happens to you. You're going to have an experience no other earthling has had. How soon can you get ready?"

"Very soon. It won't take long to select a few books."

"How about clothes?"

"Won't these I have on do?" replied the happy man.

EXPLAINED Sir Harry, "The airplane is somewhere up there in the darkness. It's noiseless in flight and absolutely under the control of its pilot. All he has to do is to press a button now and then and the electrical robot does the rest. I was to be here at 2 A.M. and flash a signal three times from my flash light. They will come down to the ground at any point we wish."

The two men were about a mile from the observatory. For over half an hour, they had waited in silence on the sands of the Arizona desert.

For Percy Whitland it was the period before the curtain rose on the most stupendous drama of his life. For the English anthropologist it was just the beginning of one day more. For the last fourteen months he had not only seen strange dramas, but had been one of the leading actors in them. Now he had only two dominant desires—to save his race, the people whom he was fond of calling human beings, and to make Charlotte happy.

Suddenly Brunton took out his flashlight, pointed it toward the heavens and flashed it on and off three times. He waited a few seconds, turned the light on and stuck it in the sands. They did not have to wait long now. Silently and without warning, something loomed above them, a soft light appeared and the bulk of a plane landed noiselessly. Small voices greeted Sir Harry, a hasty conference was held, and then the little astronomer was assisted up the steps into the plane. Sir Harry followed him and the door was shut. All lights were turned off and conversation ceased.

Percy Whitland remained silent as long as he could and then he asked, "How soon are we going to start, Harry?"

"We have started; we are well on our way back to the place I call home."

"But there's no noise, no vibration. I've never been in the air, but the machines that have passed over my observatory always made a lot of noise."

"Those machines, Percy, are children's toys compared to this one. These people have a new kind of power. I believe it is obtained from the smashing up of the atom."

Percy Whitland rubbed his hands excitedly together. "I know something about that!" he whispered eagerly.

"Fine! Perhaps that was one of the reasons they wanted you to go with us. This old bus runs rather smoothly, doesn't it? In reality we are going nearly five hundred miles an hour and I understand their planes are capable of much higher speeds. Just how fast are we going?"

HE ADDRESSED the question to a large-headed dwarf who was seated in front of them. After a slight delay this strange-looking man, who was acting as pilot, replied, "Four hundred and fifty miles, Sir Harry. We should arrive at Reelfoot at daybreak."

"That man is sitting there with folded hands," exclaimed Whitland.

"Certainly. What else is there for him to do? The gyroscopic control of the machine keeps it at the proper altitude, the power flow is absolutely automatic and before the trip was started a radio beam was established between the Crater at Reelfoot and your observatory. All that this man had to do was place the car in the path of the ray for the return journey and turn on the

power. I understand our race is able to do something like that for a short distance, ten or fifteen miles, to make flying in fog safe. The only difference is that these people are able to go around the world on such a beam if they want to. Usually, however, they prefer their tunnel cars."

"What do you mean by tunnel cars?"

"It's like this. These people live in caves and enormous craters connected by tunnels very much like the Holland Tube in New York. They travel through these tubes in long cylindrical cars nearly as large in diameter as the tunnels they dash through. They use the same motor power in these cars that they do in their airplanes, and I believe they are going to use something like that in their space machines."

"You've been living with them for over a year? What a wonderful experience it must have been!"

"I suppose so. Just like living on the verge of an explosion all the time; and then there was Charlotte."

"Yes. I had forgotten her. That seems the strangest part to me. All the years I knew you at college you never even spoke to a woman. We thought you were a real woman-hater."

"Well, it's hard to explain, but Miss Charlotte Carter is not like other women I have met."

Whitland smiled.

"Evidently not."

Just then dawn came and with it, Reelfoot Lake and the Crater. Gentle in its flight as a falling feather, the air machine settled on the edge of the precipice.

The anthropologist opened the door, and led the way to the apartment where Miss Charlotte Carter awaited them.

"No use telling the Co-ordinators that I succeeded in bringing you back with me," explained Sir Harry. "They have radio-television that enables them to follow a man very accurately and not only see him but hear his words. But now, allow me to introduce my fellow anthropologist, Miss Charlotte Carter,

When the car crumpled, there was an ear-splitting shock as though worlds had suddenly crashed into each other

lately of Virginia."

Whitland bowed and gently took the lady's hand.

"I'm proud to meet you. Harry and I went through Oxford together and though we haven't seen each other much since then, we've never lost our love for each other. I'm glad he found you."

"That was nicely said," answered the white-haired lady. "Of course, he's told you about my being here. He wanted me to go when the others left, but I just couldn't bear to leave him alone among strangers for the rest of his life. So I stayed. We are going to be married just as soon as we are able to find a preacher."

"And in the meantime she helps me forget my worries, Percy," chimed in Sir Harry. "Come, let's have some breakfast."

He pushed a button on the wall; a hitherto unseen door opened and a table set for three rolled into the room. Miss Carter made a charming hostess and, in spite of the unusual surroundings and strange food, the visitor ate heartily.

"I think you'd better rest now, Percy," suggested the Englishman. "You've had rather an exciting night. I'm going to show you to your room and we'll have dinner when you awake. Just rest and forget everything except your happiness in the prospect of accomplishing your great desire."

The big man did not leave his friend till he had seen him safely tucked away under the covers of a bed. When Brunton started to leave the room, Whitland called him back.

"I think Miss Carter is very lovely, Harry. You ought to be congratulated —on your fellow anthropologist."

Sir Harry patted the little man on the shoulder.

"That's splendid, Percy, I'm glad you like her. We're going to be so happy to have you with us, old chap."

When he left the room this time Whitland fell asleep.

III

SIR HARRY found one of the Co-ordinators waiting for him in the living room of the apartment.

"It is well to note, Sir Harry," the dwarf said soberly, "that it all turned out just as you said. We were confident that you would come back, but we were not at all sure that the astronomer would return with you willingly."

"He was more than willing. Let me tell you something," Brunton nodded confidentially. "He is a very brilliant man; in fact, I think he is far ahead of any astronomer in my race. Of course, I can't tell how his mind compares with the mind of your Specialist in Astronomy, but I think he will make a valuable addition to the scientific group working out the details of our trip to Venus."

"What does he think of the possibility of life on that planet?"

"He feels that it can be proved only by going there."

"He is certainly a very peculiar man," mused the dwarf. "Did you notice anything remarkable about his body?"

"No. He just looks a little weaker and a good deal older than he did when I knew him back in college."

"I see. He always has been the way he is now," the Co-ordinator reflected. "Some of our specialists have a peculiar idea about him which will be developed later on. The Directing Intelligence will arrive tomorrow for a conference and then we will start the final preparations for the trip. Have you anything to do this evening?"

"Not a thing."

"Then a few of us will stop in for a game of poker. Since you started to teach us the game, some of us have given it a good deal of thought."

"Well, you ought to make fine card players. You have what the Americans call perfect poker faces."

"Explain just what you mean by that."

"It means that you never indicate by your faces what your feelings are. In

your case, having no feelings, you betray no elation or despair."

"I understand now. It is something that we can't help. We three Co-ordinators will drop in tonight."

It was late in the afternoon before Whitland awoke. He found his friend reading by his bedside. It seemed hard for the little man to orient himself.

"Is that you, Harry? Where are we?" he asked.

"How odd! Don't you remember? At present you're in my private apartment in the Reelfoot Crater, one of the principal bases of the Conquerors."

"That's right. I recall now. And it must all be true. What a peculiar light!"

"It certainly is. These fellows have certainly solved the problem of illumination. It comes from a cold heat and their specialists say that it has no harmful effect on the retina. Better take a bath and dress. Our friends have asked that you wear the costume of a Specialist. Then we'll have dinner and later on some of them are going to drop in for a game of poker. Do you play?"

"Never have."

"Imagine that, when you could have used the stars for chips in a game with a fellow sky-gazer. I'll bet you can learn."

"I hope so."

DURING the past year, the Directing Intelligence, the three Co-ordinators and Sir Harry had held many a conference. Sir Harry was asked his opinion on every subject under discussion and, while his advice was often disregarded, it was weighed soberly enough to make him feel that he was considered a valuable member of the nation of Conquerors.

The morning after the poker game another conference was held, but at this one the guest from Arizona was present. As usual, the Directing Intelligence lost no time in starting the conversation.

"You may think it odd, Mr. Whitland, that we asked you to come here to assist us in our interplanetary journey. You may feel that we are strangers to you. In reality, we have been in very close touch with you and your work for a good many years."

"I'm surprised to hear that."

"You won't be when I finish. Long ago we had some fine telescopes and did all our own astronomical work. But we realized many centuries ago that in order to investigate the stars properly we had to have telescopes of great size, and these had to be in clear open places free from dust, mist and vapors. We could not use such telescopes ourselves because of our desire to remain unknown. So we started to experiment. We sent agents out to the surface.

"One of them helped Piazzi on his career, so that he discovered Ceres in 1801. Previously, in 1781, with a telescope that we indirectly paid for, Sir William Herschel had discovered Uranus. We were directly interested in the work of Professor Adams of Cambridge and that of the Frenchman, Leverrier.

"When you were still a boy our attention was called to you in many ways. We helped you through your University, and in the year of your graduation made you a rich man. Perhaps you wondered how the uncle who left you his fortune had acquired his wealth. You can guess now. We wanted you to discover the truth of certain unanswered questions which we felt were vital to the success of your undertaking. The exploration of the skies year after year was necessary for this. You did that for us as we knew you would. Our psychic life was at a low ebb that time. We lacked initiative. But Sir Harry, by his discovery of the specific hormones that our bodies lacked, has restored us to our former mental alertness. For that, we are indebted to him.

"So thirty years ago, when you started to devote your life to astronomy, we felt you were working for us, as your special hobby was Venus, the 'evening star.' That planet is the objective of our first space journey."

"May I ask a question?" said Whitland.

"Yes." The Directing Intelligence nodded his head in a regal manner.

"Why do you wish to go to Venus?"

"There are several reasons," the dwarf answered. "The first is biological. As you probably do not know, we are an emotionless race. We discovered that the action of the sun's rays was responsible for most of the emotions.

"For this reason we moved into caverns and away from the rays of the sun. Now that we wish to expand our nation, it becomes necessary to come out to the surface. The earth is too much exposed to the sun's rays. But Venus, we know, is well protected by its great layers of clouds. If therefore, our expedition is a success, and the conditions on Venus are favorable, the whole nation will be removed."

"You honor me in offering me a part in this," was Whitland's modest answer.

"Not at all. Now there is one part of your life that is more than of interest to us. In fact, it is one of our greatest reasons for determining to destroy the Middle Men as soon as we return from Venus. They would have been destroyed before now had it not been for Sir Harry Brunton. I suppose you understand what atavism is?"

"Not entirely. You see, that deals with biology, and I have not thought much about that science during the last thirty years."

"I'll explain it to you, then. Occasionally an individual is born with the physical or mental traits common to a species that existed ten thousand or a hundred thousand years ago. Examples are the Darwinian tubercle on the ear, unusual remnants of hair on the body, peculiarly shaped teeth, webbed fingers, persistence of ancient sounds in infantile speech, cervical ribs and a hundred other anomalies, showing evidences of the pit from which mankind has slowly climbed to its present height.

"We all realize that there is such a thing as atavism, and it has never worried us, because we understand it. But suppose we take the exact opposite. What would be the result if, in every generation, there were ten individuals born who were physically and mentally ten thousand, fifty thousand years ahead of their times? What would happen if these ten found each other and organized for the defense of their race against us? Of course, if we were fortunate, we could identify all these individuals and block them in some way, even kill them. But suppose they became too clever for us! We went into every phase of this danger, and at last decided that it was important that the only safe plan was to destroy the source by blotting out your race."

"This is very interesting to me," interrupted Sir Harry. "As an anthropologist I am well acquainted with the problem of atavism. That is simply the result of inheriting traits from remote ancestors rather than recent ones. But how can an individual inherit traits from generations yet unborn?"

"YOU have a perfect right to say that the future generations are as yet unborn, but that does not mean that they don't exist. We believe that the future does exist, but in a different time dimension. It is true that no two bodies can occupy the same space at the same time, but perhaps two bodies could occupy the same space at different times. That is as far as I can go just now in the explanation, but we have certain examples of life that make us feel that, when a child is formed, there is possibly a fusion of the child of 1931 and the child of 9931. As there would be only one body the result would not be like the average human being of either age, but the intelligence would be far above that of the ordinary Middle Man of what you call the human race. Now, I am going to ask you a question or two. Have you ever found a physician who explained to your satisfaction why that ego of yours that you Middle Men call soul is occupying a body so unlike Sir Har-

ry's and so much like mine?"

"No, not to my satisfaction. Most of them said that it was the result of tuberculosis, others spoke of intrauterine rickets, and still others mentioned dysfunction of the glands of internal secretion. I have not seen a doctor for thirty years. I lost faith in them and stayed away."

"Were your parents normal and healthy persons?"

"I never knew. They died when I was young."

"Have you felt a close relationship with the men and women of your generation?"

"I never had a real friend except Sir Harry Brunton. I always felt shy on account of my deformity and my difference of intellectual interests."

"Have you ever had an operation or accident in which you lost blood? Was your blood ever examined?"

"Yes. While I was at Oxford a pathologist examined my blood and said that I had a great excess of white corpuscles. He thought that a fatal condition; but I am still alive."

"You, of course, have no objection if we examine your blood?"

"Not at all."

"Very well. We will send for our Specialist in Pathology."

This Specialist must have been previously summoned, for he entered the room at once. The Directing Intelligence ordered him to make an examination of the blood of the astronomer.

A lancet was plunged into the ear lobe, and glass slides and pipettes were prepared to receive the blood. The Conquerors gathered around the man from Arizona. Even Sir Harry peeped over their heads.

The blood flowed white from the wounded ear.

"The ichor of the Gods!" said the Directing Intelligence without emotion. "We were right. Mr. Whitland is not a Middle Man. He does not belong to the human race of 1930. On the con-

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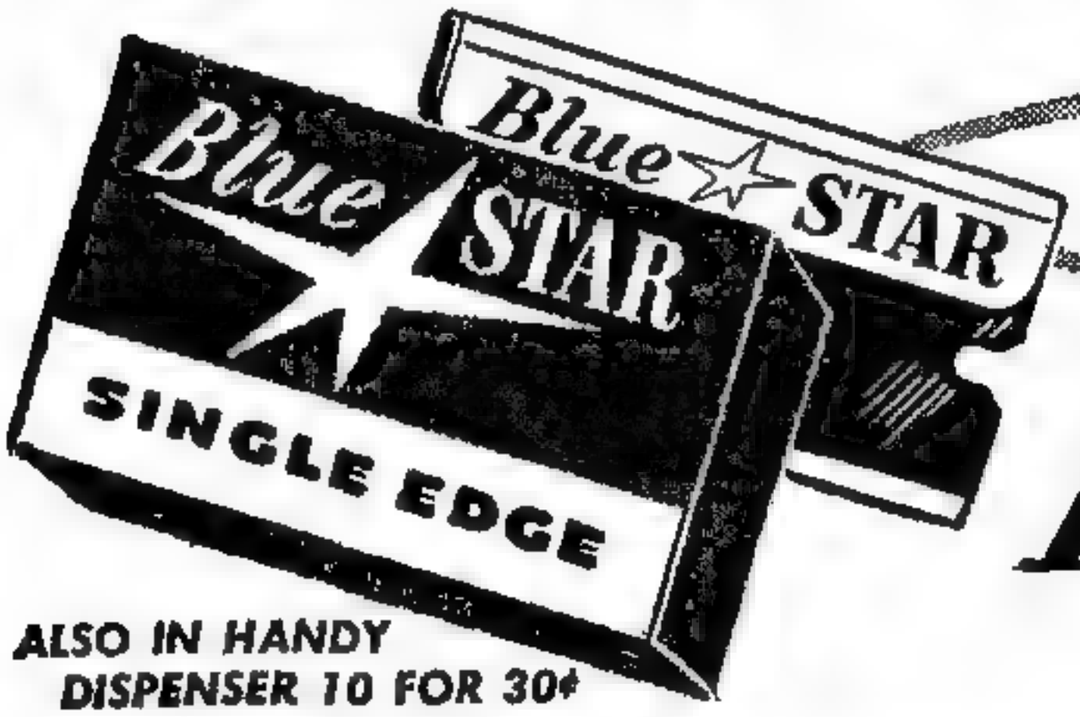

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trary, he is one of our nation, the descendant of one of our agents, who intermarried with a woman of the Middle Men. He is what you call a Conqueror."

WHITLAND swayed a little and might have fallen, had not Sir Harry caught him. Then he recovered himself and smiled.

"That is good news. Instead of being with strangers, I am wonderfully blessed by being among my own people. It makes me more anxious than ever to help you in any way I can."

"We will have another consultation tomorrow," concluded the Directing Intelligence, nodding. "It is well that we have you here—as one of us. Had you recognized your power it might have been necessary to blot out your existence in some way. As you are a member of our nation, we want you to live as long as you are useful to us. Still, the very fact that you have proved to us by your blood and intelligence that reverse atavism is possible, makes me more determined than ever to destroy the present race of Middle Men, saving only about two hundred who are to form the New York Colony."

"And I have always said," added Sir Harry, "that a civilization that cannot defend itself against any danger is no longer worthy of existence. I can say that because I, also, am a Conqueror. Of course, I have asked that their destruction be postponed till we return from Venus. But though the debacle is postponed, it is inevitable."

The four Conquerors and the two Middle Men stood up as the conference adjourned. The Englishman, looking at the five small men, was astonished to find, now that there was an opportunity for comparison, how very similar Percy Whitland was to the members of that strange race. There was a difference; his head was not quite so large, his hands were smaller and his lower limbs were more sturdy. The forehead was less prominent, the lower jaw more developed; yet the general resemblance was marked.

The two college chums returned to the Brunton apartment where Miss Carter was waiting for them.

"Did anything new happen?" she asked.

"My word, yes!" her lover replied. "They have been investigating Percy and think he is a Conqueror. They have examined his blood and claim that he has the same ichor in his veins that they have. They claimed him as a brother at once and made no end of fuss over him. At the same time they are determined to kill the rest of our race—when we come back from our space trip."

"I don't think Mr. Whitland is at all like them. It is horrid of them even to think so."

"Well, it doesn't make any difference. I am glad that he's here with us. He's going to be a big help in many ways. He may have ichor in his veins, but he has a heart in him that is as big as all out doors."

IV

"WE ARE showing you this machine and explaining it to you so you can point out its weaknesses to us, if there are any," explained the Specialist in Aviation. "We feel that we have taken into consideration every possible factor, but we want to make certain."

The party of Specialists, with Percy Whitland and Sir Harry, were standing alongside of the space machine, constructed to carry a goodly load of the nation of Conquerors on their journey of exploration. It was a cigar-shaped aircraft, nearly six hundred feet long and a hundred and fifty feet high. The bottom rested on a long slanting earth groove, the machine rising into the air at an angle of forty-five degrees. The surface was of metal, so highly polished that it was hard to tell where the metal body and the thick glass windows joined. The party took an elevator and descended to the bottom of the hole, where

the rear end of the new machine lay comfortable and safe on pnuematic cushions, reinforced with powerful spiral springs. At the very end four openings showed jet black against the clearness of the polished metal. Fifty feet from the end there were other black openings arranged like beads around the circumference, at equal distances from each other.

"This is a perfectly constructed rocket ship," explained the Specialist responsible for the ship's construction. "The forward motion depends on the four rear tubes; the steering is done by making use of selective combinations of the other tubes further front. The ship itself is made of three layers of beryllium, between which are almost perfect vacuums. The beryllium weighs one-third of an equal volume of aluminum. We have solved to our satisfaction most of the problems which, so far, have kept us on this earth. We feel that once we ascend beyond the atmosphere of the earth, we shall have no trouble in going through space at a speed thus far considered impossible. The first problem is to overcome the gravitation of the earth. I wish you would give us your figures on that to see if ours harmonize."

"Well," replied Whitland. "To be on the safe side, I think that your spaceship ought to leave the earth at a speed of six miles a second. That would be nearly three hundred fifty miles the first minute and by that time the ship would be well outside the earth's atmosphere. Of course, it would have to keep on going; otherwise it would be captured and become a satellite like the moon. Once your car is sufficiently beyond the heavy gravitational pull of the earth, it can attain quite a respectable speed and keep on going until it gets within the gravitational influence of Venus. Your ship will be moving in space that is relatively empty. It has always been my idea that a properly propelled ship could be made to travel with the same speed that our earth does about the sun, approximately eighteen and half miles a second, or about one thousand times the speed of the fastest express train. Of course, such a speed can only be obtained in space where there is no atmosphere."

"You agree with us then that space is relatively empty?"

"Absolutely."

"Then we are not apt to be impeded by friction. What other dangers are there?"

"How about your supply of oxygen?" Whitland asked.

"That has been arranged for. We will make it as we need it, and we can remove the carbonic acid gas. Our food supply is also going to be adequate."

"Is your ship so tight that it will hold its air when it is in the almost perfect vacuum of space?"

"Yes."

"Well, of course, there is danger from meteors, but mathematically your chances of avoiding them are very good. What have you done to slide into the atmosphere of Venus so slowly that you won't heat the ship to such a temperature that life within it will be destroyed?"

"A very good question. Just as soon as we approach the atmosphere of Venus, we will turn off all our power except just enough to guide the ship, so that we will enter the atmosphere in a slanting direction. Then we will start some shots from the rockets on the front of the ship, and these will act like a brake. Our mathematicians have calculated that we shall be able to take our time descending to the Venusian surface once we enter her atmosphere."

"Then all that remains is to determine whether your source of power is adequate for the trip."

"That's all. You had an example of it in your air trip here from Arizona."

"I understand that you destroy the atom?"

"Completely. By means of an extraordinarily high voltage we are able to break down the atom and release its energy. Breaking down carbon, for ex-

ample, gives us eighteen thousand million times the amount of energy we should obtain if we simply burned it as coal. This energy we use for our rocket explosion. It is being done all the time in the universe around us, in the suns and stars in space."

"Yes," agreed Percy Whitland slowly, "there is no doubt that the complete destruction of matter in space is responsible for the highly penetrating rays that are constantly battering the atmosphere of the earth. It is probably this force that keeps alive the sun and stars."

"Have you any suggestions to make, Mr. Whitland?"

"Not now. I shall have to think it over."

Just then a message came from the Directing Intelligence, stating that he intended to call on the astronomer that evening.

"You are becoming popular," commented Sir Harry. "A little more and I am going to become jealous of you. It's Mr. Whitland here and Mr. Whitland there. They seem to forget that I exist."

The little man laughed at him.

"Forget it, Harry. I'm just a new toy for them to play with. When they want action, they'll come to you. I'm not forgetting you. I have a surprise for you and Miss Carter that I'm going to spring on you some day."

SAID the Directing Intelligence that evening to Whitland, "I understand that your ideas of conditions on the planet Venus are different from those of most astronomers. Is that true?"

There was only one other at this conference, Sir Harry Brunton. For some reason, the Directing Intelligence had thought it best not to have the three Co-ordinators present.

This caused the two friends from the earth's surface a considerable amount of surprise, for in all previous meetings the Coordinators had been present. It seemed therefore to Sir Harry that there had been some changes in the relationship between the Directing Intelligence and his subordinates.

Sir Harry's comment on this strange event was to wink at Percy Whitland significantly.

"I suppose you are right when you say I differ from them," replied the astronomer from Arizona, "for I represent the hopeless minority. I think we all see the same things, but we differ in our interpretation. In the seventeenth century Bianchini, the Italian astronomer, made frequent observations and drew maps of what he claimed to have seen on Venus. The interesting thing about those maps was that the continents were of the same size and shape on both hemispheres, that is, on both sides of the planet. It remained for another Italian, Schiaparelli, to point the way to the great truth behind this similarity. What the first Italian thought to be two hemispheres were the same. Schiaparelli demonstrated that Venus always presents the same face to the sun as it circles around it during its year of two hundred twenty five of our days. He watched the 'evening star' night after night and month after month, and found that the surface markings never changed.

"His conclusion was that there are two distinct portions to Venus—a dark half of intense cold and a light half of intense heat, at least sixty degrees hotter than it ever becomes on the Earth. On the basis of that discovery almost every astronomer in the world believes that life is impossible on Venus."

"And you?"

"Oh! I had to be different. That was my hobby. I felt that there *ought* to be life there; so I started out to prove it. But before I go on with my opinion, suppose I describe to you the geography of Venus as it is generally accepted by my co-workers. The hemisphere that faces the sun seems to be a desert, windswept and sun-baked. Dust storms of great velocity sweep over it, polishing its dirt floor till it becomes smooth as

marble. Great crevasses extend in every direction where the heat-tortured surfaces have been torn apart by thermal changes. Every drop of moisture is carried into the upper atmosphere by the heated winds. These blow high into the air and then roar to the right and left, till they reach the dark edges of the other dismal hemisphere which never knows the piercing rays of the sun. These moisture-laden winds, these water-bearing clouds, entering the land of perpetual darkness, condense and pour down their burden of moisture. First it descends as rain, but as soon as the darkness gathers into a more Stygian gloom, it becomes a blizzard, a snow such as no earthly eye has ever witnessed. These blizzards have been going on for thousands and hundreds of thousands of years. All of that dark side of Venus is covered with a perpetual mantle of snow over a layer of ice and it all rests under an eternity of desolate midnight. The cold wind, with all its moisture taken from it, curves around till once again it comes into the land of perpetual sunlight, where it picks up more water in the form of vapor from the heat-tortured desert.

"That is the way Venus would look if we could see all of her. One-half of it baking desert, the other half covered by glacial ice and heaps of everlasting snow. But around the south pole rise lofty mountains, whose peaks we can see projecting like warning fingers above the clouds of heated moisture. These mountains must be over twenty miles high, perhaps higher.

"What a fascinating spectacle it would make to be out in the emptiness of space with a powerful telescope, and watch the eternal cycles of climate on that mysterious planet. Or to be an ageless observer, who has seen the evolution of the planet from time immemorial.

"One could have observed not only the evolution of Venus from the day she was flung off from the sun as a glowing mass of lava—but also the catastrophe—the collision between the sun and a visitor from space that brought all the planets into existence.

"It should make one feel a little humble when he compares his own little life span, his own little powers and intelligence with those mighty forces that have made our planets and cause them to speed ceaselessly around our sun."

WHITLAND was afire with glowing enthusiasm. It was with a great effort that he suddenly remembered that he had wandered far from the subject of their discussion.

"We were talking about the violent contrasts of the climates on Venus," he said meekly.

"My word!" said Sir Harry. "And yet you think there is life there? Hot as hell on one side, and cold as hell frozen over on the other, and no place to go! Where could they live, those dwellers in Venus? What will happen to us if we ever arrive there?

"Do you think that you really know enough about Venus from your observations to predict what we might find there?"

"I haven't finished," said Whitland, smiling at his giant friend. "I started to study Venus from my observatory in Arizona, and my photographs showed peculiar markings on the planet which made it look like a wheel with dark lines as spokes. These spokes never varied.

"From my observations I deduced that while Venus always presented the same face to the sun there was a slight shifting every four months in the position of a band or zone, due to the inclination of the axis of the planet. Now whenever this oscillation occurs, a long strip of land extending from pole to pole and about one hundred miles wide is brought from its state of sunlessness into the sunlit area. It remains in the full glare of the sun's rays for four months and then slowly goes back into the shadowless night of the doomed land. The same has happened upon a

similar area one hundred miles wide on the other side of the planet, which now turns its glaciers toward the sun, and four months later goes back again.

"Can't you imagine what happens? Venus is thirty million miles nearer the sun than Earth is. The temperature on the hot side is perhaps twice that of our Earth. Within a few days, the glaciers are suddenly exposed to the intense heat of a tropical summer. Naturally the ice and snow melt, and a flood of water rush headlong in mighty rivers out to the torrid deserts of the Venusian hell. These rivers are perhaps five hundred miles wide as they leave their source in the melting snow mountains. As they rush over the baked mud, more and more of the water sinks into the hot dirt and the rivers become narrower. At last they are exposed to the full heat of the torrid sunlight and wither away into clouds of steam, which, carried to the atmospheric belt of the planet, once again turn into the snow and ice of the cold half of this peculiar world.

"There must be enormous clouds of steam-filled air, and I am sure that it is due to these clouds that we cannot see any of the surface distinctly. We are told that Venus has an atmosphere but that it is so attenuated that life cannot exist there, and that what atmosphere there is has no oxygen. I believe that this is not correct. Where there is so much water, there must be oxygen.

"If we look at the 'evening star' from this point of view, we see that one side is torrid and the other side more than frigid, but between these two extremes is a circular strip of land, several hundred miles wide and twenty thousand miles long, that is neither very hot nor very cold. If people lived there, they would always see the sun low in the sky, and have pleasant conditions with regard to both light and heat. There would be abundance of water for agriculture. It seems to me that there is everything there to allow a splendid civilization to develop. There is also another point to be considered. What effect has a covering blanket of moisture-laden clouds, fifteen or more miles in thickness, on the heat that pours down from the sun? Perhaps conditions there are more livable than we imagine."

"You present an excellent argument," said the Directing Intelligence. "Yet there must be a great many weaknesses in it, for according to your own statement, not a single one of your astronomers agrees with you."

"I know that. But at the same time I believe I am more nearly right than they are. You see, the telescope I was working with in Arizona is practically the largest one in the world, with a four hundred inch mirror. Its size was made possible by the development of the use of fuzed quartz. I can obtain much sharper details on my photographic plates than others can. In fact, I obtain a picture of Venus entirely different from that of any other astronomer. But after all, it is simply a matter of interpretation. For years we have worked and studied and plotted and tried to explain the canals of Mars, and now, Hopewell, the famous astronomer, says there are no canals—that they have not been able to withstand the acid test of photography. I showed him my pictures of Mars, and he simply shook his head and said that they were not canals, but that he did not know what they were. I think that sometimes the best of us think a thing so long and so hard that we end up by believing it."

THE Directing Intelligence stood up, signifying that the interview was at an end.

"We will try it. There are still some questions that cannot be answered at the present time, but we will find the truth eventually. It we succeed, our race will indeed be worthy of the name of Conquerors. If we fail, we will die in empty space or on some planet that for the first time will feel the presence of human life. I—"

There was a slight buzzing of an in-

strument on his table. He adjusted a pair of earphones and then spoke. Immediately one of the Co-ordinators entered the room. While his face wore the usual expressionless gaze, there was something in his eyes that indicated news of the greatest importance. He lost no time in making known his errand.

"We have just been receiving some unusual messages at our radio-receiving station. We thought that you might like to know of these at once."

The Directing Intelligence nodded.

"For several hours we have been receiving very strange communications. Af first we thought they were in code, but then it dawned on us that someone was trying to communicate to us in actual language. We decided to call in the Specialist in Philology and he told us that every time the message came it was in a different language, but that each time it meant the same thing. For a long time the dead languages of the Middle Men were used—ancient Chaldean, Egyptian, Greek, Basque, the old Gaelic, and a dozen of others. Then came medieval languages and modern –Italian, English, Russian, and other European languages—and finally, as if to show their thorough mastery of every language, they sent the message in our own tongue. I suppose that message came in over a hundred different forms."

"It's easy to understand why it came that way," commented the Directing Intelligence, "for whoever was sending it was not sure of the language that was being spoken here and in order to make sure that it would be understood he used every language of every age. What was the message?"

"A peculiar one. Simply this:

Follow Number Eighty Five"

"That's very interesting. What does it mean?" asked the leader of the Conquerors.

"We don't know. That's why we wanted you to know of it at once. You,

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as the Directing Intelligence, are all-wise."

The Directing Intelligence turned to Brunton. "I am afraid my people will need another treatment from you. You see, they rely on me completely. They have no initiative."

Then, turning back to the stolid Co-ordinator, he said, "I do not understand it. Broadcast the question at once to every Specialist, *What does eighty five mean in connection with this message?* Say that an answer is to be given at once. I will await a report."

He waited. Specialists in America, in Africa, in Asia, in Australia caught the question flying with the speed of light through the air and reluctantly replied that they did not know. As answer after answer was flashed back it was more and more apparent that the question would remain unsolved. Meanwhile Whitland and Brunton had been dismissed and, at Whitland's suggestion, had gone to visit the central radio station of the Conquerors.

V

IT WAS the next day when the two men, haggard and weary, appeared before the Directing Intelligence.

"Have you found the meaning of that strange message?" asked Whitland.

The dwarf shook his head. "I have two hundred negative replies from two hundred Specialists."

"I think we have found an answer," Whitland said calmly.

The Directing Intelligence fixed keen eyes on the astronomer.

"Since we left you, we have spent most of the time at your radio station," Whitland began. "Working in cooperation with its controller, we have been able to determine the general direction of the source of the messages."

"And that is—"

"From interplanetary space!"

Only the faintest movement of the Directing Intelligence's eyes betrayed any excitement over this astounding news.

"Furthermore," Whitland continued, "the messages seem to come from the general direction of Venus, which is approaching inferior conjunction with the Earth.

"We can not say positively that the messages *do* come from Venus. But there is a likelihood that if there were intelligent beings on that planet and they wanted to communicate with the Earth, they would avail themselves of this opportunity when the two planets are closest to each other."

Another flicker of the Director's eyelids indicated that he was closely following Whitland's exposition.

"Now," continued Whitland, excitedly, "there remained the big question to settle! Suppose intelligent beings were communicating with us, what would their message mean? Remember that they said *'Follow number eigthy five.'* They evidently wanted the message to reach only beings whose knowledge is sufficient to penetrate the meaning of this apparent code. And if we could do that, the Venusians, if Venusians they are, wished us to have a means of finding them."

He paused for a moment to regain his breath. Brunton placed a supporting hand on the little man's arm, meanwhile looking at him in admiration.

"Now I deduced at once that the means of communication for such a purpose could be one of two things—either a radio beam such as you use for guiding airplanes, or a ray of light perceptible to our spectroscopes. The number eight-five could refer to a wavelength or some other quantity. But, acting on the hunch which is often the means to great discoveries, I tried a new tack. In the scale of the atomic number of various elements there are two missing places—one is number eighty five and the other, number eighty seven."

"What are these substances?" asked the Directing Intelligence.

"That is the interesting point. We all know that hydrogen has the atomic number one and from there on we go

up to and include the number ninety two. Of course, some of these substances are very rare, but we are sure that all of them exist. However, eighty five and eighty seven are missing numbers. We feel sure that they exist somewhere, but we have not found them in any spectroscopic analysis of the light from the stars. So they are simply unknown elements, the existence and characteristics of which we can only guess at."

The Directing Intelligence turned slowly in his chair so he could look directly at Whitland.

"Then you are saying that you know something about a thing, when in reality you know nothing about it?"

"Yes. That is my position. But suppose that this message is from some form of life in Venus? They tell us to *'follow eighty five.'* The very word *follow* implies that they know, or hope, that somebody contemplates a trip to their planet. It looks as though they were trying to help us to reach them. They give us a pathway! Oh, that is a stupendous idea, but it may be possible! Suppose they are sending us a ray of light that gives distinctive bands in the spectroscope—a spectrum different from any so far known? Then all we should have to do would be to mount a spectroscope in the front of the car, and, by automatic control, keep the nose of the space car continually in that ray of light."

THE DWARF raised his hands in protest.

"Do you mean to say that we could follow a ray for twenty six million miles?"

"Well, there is no need to," interposed Brunton. "The way we look at it is that you will have your own means of getting to Venus. Your Specialists with the aid of Mr. Whitland are perfectly competent for that. But, my word! Suppose you find that your own path checks with a beam of light with the characteristic spectrum that we think belongs to 'eighty five'. Then you would have definite proof that some beings on Venus want us to come!"

"And if the ray is there," Whitland said, "it must start from the same place that the message came from. We know that we are continually receiving light from Venus. What is that light but rays? Suppose those people had a great quantity of this element eighty five and were to heat it in large enough amounts to send out a radiation? It may be that the entire planet of Venus is composed of this substance, but that up to now the thick blanket of steam has been able to hold the rays back. Perhaps they have found some way of blowing that fog aside for a short time? I don't know! But if I could lay my hands on a spectroscope, I should like to see just what kind of light is coming from Venus at the present time."

"We have a small telescope right here, also a spectroscope."

"I would much rather use my own in Arizona. Should you object to my returning there for a few hours of observation?"

"Suppose you use our apparatus first. If you don't obtain results, we will consider your request."

Early that evening the party was in the observatory, and Percy Whitland was feverishly adjusting the mechanism of the telescope in harmony with the spectroscope. At last he finished and the "evening star" was brought into the optical field. With him were the Specialists in Astronomy, Chemistry and Mathematics, as well as the Specialist in Aviation and the Directing Intelligence.

"Now, we can watch the spectrum appear. I presume we are all familiar with the various lines. I should like to have the opinion of all of you as to just what we are seeing."

Slowly the bands of light began to form until finally they became stationary. Whitland sucked in his breath with an astonished gasp, but the Specialist in Chemistry nodded his head with conviction.

"That is new!" he said slowly.

"It certainly is!" agreed Whitland. "We are looking at the spectrum of an element that so far has never been identified. It is different from any stellar spectrum I have ever seen, and there are certain lines there which make me confident that the light is originating from a luminous element in practically a pure state. It comes from Venus!

"Gentlemen, here is my advice. Change the nose of your space car so that the very tip forms the end of a telescope. Make that telescope as nearly perfect as possible. At the inner end attach a spectroscope. You will find then, if my deductions are correct, that the path you have chosen for reaching Venus will keep your space car always in that ray of light."

"Just one more question," said the Directing Intelligence. "We know that all the stars are made of many different elements in combination. What basis have you for the belief that this is the spectrum of but one element?"

"I told you that I was not absolutely sure," replied Whitland, and there was an element of weariness in his voice. "But it is a reasonable deduction. They may have collected it, or it may be natural—a huge mountain formed of one element. Or Venus may all be of that material, and we never saw the spectrum because of the clouds."

Slowly the Directing Intelligence shut his eyes. The veins in his forehead enlarged and pulsed rhythmically. Little beads of sweat came out on his domed foréhead. Ten minutes passed, twenty minutes—and at last he spoke:

"I direct that the changes in the space car be made."

IT WAS late, very late, when the two Middle Men returned to the Brunton apartment. Miss Charlotte Carter was waiting for them. When they entered the living room, she was busy darning stockings, and there was no doubt about the fact that these stockings were the property of Sir Harry.

"Well, my dear friends," she exclaimed, "you certainly have had a day and a night of it. Do you think you can stop long enough to eat lunch before you return to work?"

"My word, Charlotte!" sighed Sir Harry, sinking heavily into an easy chair. "I hope there's nothing more for the next twenty-four hours. It was not just physical work, but the tremendous task of trying to follow the scientific discussion of these Conquerors—and Percy. My dear, you would have been proud of Percy if you could only have heard him strut his stuff before the rest of them. He made them look pretty cheap, with all his accumulation of knowledge, and it looks very much as though he would be the next Directing Intelligence if anything happens to the incumbent. They don't like to acknowledge that he knows a shade more than they do. It makes them feel a little peeved, but he made them admit it. Looks as though our friend Percy Whitland were a real man. I hope you will never admire him as much as I do, for if you do, it is all over with your present admirer and humble slave."

Miss Carter blushed, as did the man from Arizona.

"He's just teasing us, Miss Carter," protested the little man. "You know how these people look up to Harry."

"They look up to me all right," acknowledged Sir Harry, "but it's on account of my six feet three inches instead of my brains. But to change the subject, Charlotte, what do you think happened to keep us away so long? We actually received messages form Venus, indicating that sentient creatures want us to go there. And had it not been for Percy, no one would have had the least idea what these messages referred to. My word, but he made their eyes bulge out when he showed them their real meaning! Let's eat and then try to get some rest."

The minutes passed in silence while the tired men satisfied their hunger. At last the woman spoke.

"And are we really going to Venus, Harry?"

"Yes, some of us. Perhaps the Directing Intelligence, the three Co-ordinators, about one hundred of the Specialists, and Percy. I suppose they will take me along."

"How about me?"

"Why, I was going to propose that they let you go back to New York City.

PASS THE LETTUCE

A COW has to eat 125 pounds of grass to turn out 50 pounds of milk. Normally Elsie puts in a seven-and-a-half hour day of chomping, regardless of the condition of the pasture. In that time, if the grass is five inches high she will get her 125 pounds of forage. If the grass is only two or three inches high, she will only get about 45 pounds for the same amount of tooth gnashing, figuring 50 to 70 bites per minute. She lies down nine times for a total of 12 hours during the 24. She chews her cud seven hours a day, grazes a distance of four miles, drinks 10 times.

These earth-quaking statistics were collected at the University of California, probably shattering Bossy's privacy and peace of mind forever.

Your nieces will be delighted to see you."

Slowly she put down her work. "Don't you understand that I cannot go back? Not now! And I certainly am not going to stay here all by myself. Suppose something should happen to you while you are on the trip? Who would take care of you? There may be life on Venus and perhaps you might not be able to return, and would just stay there and marry one of those women."

"What women?"

"Why, those women on Venus."

"My word, Charlotte! You know I wouldn't do that. How could I without a preacher?"

"Men have done it before. Please, Harry, promise you will take me with you!"

"I don't see how I can—all right, I'll try! Please don't cry—don't even look as though you were going to! You see, Percy, the little lady loves me, and when she remained here she naturally thought we would slip out to a church somewhere and be married by a preacher. But she discovered too late that these Conquerors don't have either a church or a preacher, so we couldn't get married. She has been just as nice as everything about it, but it was a great disappointment to both of us."

SAID Whitland, "I believe I can do something for you when the right time comes. But to change the subject, Harry. When we start on the trip, what's going to happen to all these poor slaves they have here, and to the rest of the nation?"

"That bothered me for a while, but I have proposed a plan to them that has finally received the approval of the leaders. I think they will start to put it into effect tomorrow. Their first plan was to kill everyone they left in their underground cities, even their own people; for you see, without the leaders, the mass of the Conquerors are helpless. Then when they came back they were going to start a national life with new units. You see, they perpetuate their race like ants or bees, and have only a few females; almost all their active units are simply neuter workers. But I proposed that they give each person a somnifacient* hypodermic, to last at least a year. If the dose is not repeated at the end of a year, the units slowly die a painless death. If desired, they can be given another sleep hypodermic or they can be given an injection that will restore them to activity. So, that's what's going to happen. When we leave the

*Sleep-producing.

Earth, everyone in their crater cities will be asleep, and if we don't come back in a year's time, they will remain asleep —forever."

"That's one reason why I want to go with you men!" declared Miss Carter, emphatically. "It's that little doubt about your coming back. What would life be worth to me if I had to wait year after year, hoping against hope for your return, and knowing year after year the hopelessness of it?"

"Charlotte!" said Sir Harry, and there was a warm, vibrant tone to the word. "Do stop worrying! If I go, you go! Perhaps—why, perhaps we may find a preacher there, who knows! Now, be a dear and go to bed. I want to talk a little to Percy before we turn in."

So the little white-haired lady said goodnight and left the room. The two men watched her till she disappeared.

"She certainly is in love with you, Harry," whispered Whitland.

"I know that. Think of her giving up everything just to stay with me. What's your reaction to all you've seen and heard, Percy?"

"Looks like an adventure to me, a grand adventure!"

"Do you feel any different since you found out that you are practically a Conqueror yourself?"

"No. I don't think there's very much change in me."

"You still feel that you're a human being, one of us, the same kind of being that I am?"

"Yes, I guess so. I have their blood in me and perhaps their intellect, but at the same time I still have all the emotions of an ordinary man. I can harmonize with them intellectually, but when I see their faces, absolutely devoid of feeling, I grow cold all over. It makes me shiver when I think of their plan to kill the human race—when they come back from Venus."

"I see. Then I can tell you something .... They have promised me that they will not slaughter mankind till they return. They are going to Venus, Percy, and we are going with them, and it looks as though Charlotte was going, too. But Percy—*we are not going to return!*"

VI

FOR the next two weeks there was a hum of ceaseless activity all around the giant aircraft. Had it not been for the super-human intelligence of the Specialists, the perfection of their robots and the surplus of human slaves, the necessary changes involved in placing a telescope in the nose of the machine could hardly have been made without actually rebuilding the space-flier.

But the construction was attacked from a dozen points at once, and at the end of two weeks, not only was the telescope in place, but it was arranged mechanically so that it could always be pointed at Venus. Whitland, seated in the specially constructed cabin-observatory, had the satisfaction of looking through the scope at his old familiar friend, and of personally adjusting the spectroscope so that every ray of light that entered the telescope had to pass through the spectroscope, to be instantly broken into the bands of the spectrum. The plate that finally received this broad band of many-colored lights was delicately adjusted to control the mechanism that controlled the telescope. Gyroscopes, set in three planes, were able to control to a fraction of a degree the course of the ship so that it always would be pointing in the direction of the chosen course.

This course had been laboriously plotted by a consultation of the Specialists in Mathematics, Astronomy and Aviation together with Percy Whitland. The shot was to be aimed at a point in the orbit of Venus, where it was expected the planet would be in four weeks, the time allotted for the journey. This point was to be the inferior conjunction with the Earth.

Once the flight was started and the void of space penetrated, it would be

necessary only to see that enough power was developed to maintain a sustained flight through the vacuum.

The new spectrum remained constantly true to type. The scientists studied it from every point of view, and they were all satisfied that the light was proceeding from a new element. Some wanted to call it *Venusore*, but the majority favored naming it *Whitore* in honor of the new Conqueror from Arizona.

No more messages had come from the distant planet—a circumstance that caused some comment. Was the cessation of communication due to the senders' knowledge that the message had been understood, or had they been disappointed at their failure to receive an answer? Either way, they would soon find out the real truth. They had sent a message to Earth, and Earth was replying with a spaceship, loaded with Conquerors!

As the need for the slaves came slowly to an end, they were collected by hundreds and thousands and given their sleep-producing hypodermic. This seemed, to many of the Conquerors, like a useless expenditure of time and effort, but it was the command of their leader, and they had obeyed passively for too many years to disobey now. Skilled experts entered the Queen house and put to sleep the females, who knew no other life than that of propagation. The endless belt in the incubator house was stopped, and the premature infants were taken out and disposed of. The nurseries were visited and all the baby units put to sleep.

The little ones who never had known the embrace of a mother's arms were lulled by a needle. In the laboratories where human experimentation was in progress, the subjects of incomplete scientific investigation were sunk into a narcosis, which would put an end to the mental tortures of their countless humiliations for a year to come. Last of all, on the day before the actual departure, all the Directors and over one hundred twenty five of the Specialists were assembled at Reelfoot, placed in long rows on the floor of one of the dry caverns, and there stupefied so that, when the rest of the nation returned, they could be awakened to a life of renewed usefulness.

The hum of work had come to an end. The Specialist on Aviation and his assistants again went over every part of the machinery on which the lives of a nation depended. At last they were satisfied. All the stores were in place. Every person had been assigned to his special cabin. Work was allotted to each individual.

Only Miss Carter seemed without a specific task. The Conquerors were not pleased with the idea of taking her with them but, as usual, Sir Harry had been able to carry his side of the argument. It seemed that she darned his stockings, and no one else knew how. He argued that he was not capable of doing his best unless his stockings were darned, and that no one could darn them except Miss Carter, and—

The Directing Intelligence made Sir Harry stop there.

"I never could understand why you wanted this thing, Sir Harry. It is true that I had her brought here, because I had the idea that all Middle Men wanted female things like that for their slaves; but instead of making a slave of this one, you treat her as more than an equal. You don't even live with her, because you haven't found the proper person to say words before. How can you be happy on the trip if that useless unit goes with you?"

"I tried to explain about the stockings."

"Don't go all over that again. Take her with you if you want to, but keep her out of sight."

EVENTUALLY everything was done. The day and hour for the departure was set. At the last moment a careful check-up of the food requirements made it necessary to eliminate twenty-

five more of the Specialists, and these were put to sleep along with their dormant fellows. The actual embarkation was begun. Every passenger was in place. Percy Whitland, the Directing Intelligence, the Specialists in Electricity and Aviation were in the pilot-room back of the telescope. Nothing remained except for the Directing Intelligence to touch the button that would initiate the first rush of power through the stern rocket tubes, causing explosions that would in minutes place the car well out of the earth's atmosphere and, in a few hours, far beyond her fatal attraction of gravitation.

A Conqueror in charge of shutting down the central radio station approached his Specialist with a message. The latter transmitted the message to his superior who in turn sought out the Directing Intelligence, who was holding a long and earnest conversation with Whitland in the control room of the ship.

The Directing Intelligence turned to Whitland.

"The same thing is happening that took place the other evening. Messages are coming through space in every known language. The message is always the same, no matter what the language. It is this:

"Protect against eighty-seven"

"Another element!" exclaimed Whitland. "First comes the instruction to follow eighty-five, and when we are all ready to do that, we receive a warning to protect ourselves against eighty-seven! But that's the other unknown element. How can we protect ourselves against something that we are ignorant of!"

"You think there is a danger?" asked the Director.

"There must be! These friends of ours on Venus must realize that element eighty-seven possesses power deadly to life. They feel that we are ignorant of it, and so have decided to warn us of it."

"That sounds reasonable," agreed the Directing Intelligence, "You believe that such an element exists in space and yet our scientists remain ignorant of it?"

"Yes, I think I can explain that. The Earth is blanketed with an atmosphere which contains a large percentage of oxygen. There is no doubt that this blanket shields us from the intensity of the cosmic rays. Some of these are changed to heat rays, and some may be totally blocked in their attack on the Earth. The people on Venus may realize our ignorance and may be trying to warn us of a danger that will come as soon as we reach empty space."

"But our Specialists assure me that all this has been taken into consideration."

"I believe they are correct—to the extent of their knowledge. There is no reason to doubt that the walls of our spaceship form ample protection against the rays that we know about. But how about the rays from element number eigthy-seven? How can we protect against an unknown danger?"

"There are only two things we can do," said the Directing Intelligence. "Either remain for further study, or touch the button that will send us into space."

SOMEHOW the news spread through the ship. A low buzz of conversation filled every room. Minutes passed and at last an hour, leaving the Directing Intelligence still undecided. Finally, refusing to assume the entire responsibility, he called for a conference of ten of his leading advisors. This number included the three Co-ordinators, Sir Harry and Percy Whitland. The problem was stated to them and they were asked for an opinion. Several of the ten refused to express themselves, replying that their previous experience and acquired knowledge were insufficient to throw any light on the difficulty. Whitland had told all he knew when the message first came. To the surprise of all, including the orator himself, it

was Sir Harry Brunton who decided the matter for the conference, and what he said was not a solution but a challenge.

"We call ourselves the Conquerors!" he almost shouted to the other nine men in the room. "We pride ourselves that we have ruled the Earth for thousands of years with an intellectual rod of iron. For a century we have been planning a voyage in space to find new worlds to conquer. Are you going to hesitate because of a simple message? A few words that mean nothing and may be simply the idea of some idiot? We are all ready to go. If we hesitate now because of a supposed danger we will never go, for as fast as we protect ourselves against one danger another will develop to scare us. Never before in the history of the Universe have men come so near annihilating space as we came today, and are we to hesitate, turn back, frightened at something we do not understand? I am an Englishman —at least, I was one till you adopted me into your great nation—but even the nation I have renounced never knew when to quit. My vote is for an immediate starting of our journey. Let us deal with each danger as it arises!"

When he was asked later about his reactions at this most perilous moment, Sir Harry smiled. He was not certain, he said, that his appeal would have any effect on these stolid emotionless people. But as an anthropologist he had believed that one's emotions can never completely die. A spark of them always remains that may be quickened into life. As he looked at the Conquerors on the completion of his speech, he did hope and feel that something vague and dormant had been touched ever so slightly and there was the merest stirring inside of these emotionless beings . . .

The Directing Intelligence looked around the council. Then finally with an effort he arose, signaled to the Specialists in Electricity and Machinery and to Percy Whitland to follow him into the

[*Turn page*]

oh-oh, Dry Scalp!
"... IMAGINE ME dancing with a scarecrow! How can he be so careless about his hair? It's straggly, unkempt, and ... Oh-oh—loose dandruff! He's got Dry Scalp, all right. He needs 'Vaseline' Hair Tonic."
Hair looks better... scalp feels better... when you check Dry Scalp
Vaseline

HE TOOK HER TIP, and look at his hair now! 'Vaseline' Hair Tonic can do as much for you. Just a few drops a day check loose dandruff . . . keep hair naturally good-looking. It contains no alcohol or other drying ingredients. Gives double care to both scalp and hair . . . and it's economical, too!

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Listen to DR. CHRISTIAN, starring JEAN HERSHOLT, on CBS Wednesday nights.

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pilot room. As the entire ship rested at an angle of forty-five degrees all motion was by movable stairs, but at last the room was reached and the signal was passed through the ship to prepare for flight. Each passenger securely fastened himself in a pneumatic chair, built to protect against the violent displacements which might occur during the first few minutes of flight.

Then the leader of the peculiar nation known to us as the Conquerors, touched the button.

With a tremendous roar, the great space flyer rose from the pit and sped like a silvery comet into space. Up, up it went and gradually its nose was turned to the point in space where there was to be a meeting with Venus four weeks hence. The men in the pilot-house saw the needle of the speedometer swing slowly around as the space visitor gradually gained in speed. So far, the automatic control was working perfectly, there being not the slightest change in the spectrum. The propulsive machinery of the ship was also delivering its power in such a smooth flow that there was little throb, little noise, only a continuous power, a mighty propulsive force that shot the silver needle through space that had never known a human visitor.

Hour after hour the four sat in the pilot-house and then, satisfied that all was well, the Directing Intelligence and Whitland left. The astronomer went at once to Sir Harry's cabin.

"That was a fine effort you made, Harry," he said. "For a while I was almost enthusiastic myself over the prospect of a safe trip. Then I saw your idea."

"My idea?"

"Certainly. You've never forgotten that you are an Englishman. Your country comes first. I know why you want this trip started."

"Percy! Are you a mind reader?"

"Not much of one, but enough to follow your mental processes."

"Then suppose we hunt up Miss Carter and have something to eat? They loaded the storage rooms with food tablets, but I have an idea that by this time the little lady has taken six of those tablets and converted them into a palatable meal. She must be worried. She's a splendid little lady, Percy."

"You bet she is! I have something in mind for you two."

The space machine shot on steadily into space. It was flying in an almost complete vacuum, and consequently. meeting no resistance, its speed became greater and greater. Finally the men in the pilot-house had the satisfaction of seeing that they were traveling at a speed of about forty thousand miles an hour that would bring them to Venus on the twenty-seventh day.

Hours passed by, and days, without the slightest change in the program—days devoid of the least unusual experience. The passengers soon adjusted themselves to the deadening routine of the enforced confinement.

It must not be thought that the departure of the space flyer from the Reelfoot Crater had passed unnoticed by the other people on Earth. During the initial hours of its flight the ship had at once been noticed and followed by many astronomers. While numerous explanations were offered, only two men, Mallory Wright and John Ormond, had a clear conception of what it meant to mankind. They knew that the Conquerors were off into space and that Sir Harry was with them, and they were confident that in some way he would hold back these scientific wolves from their desire to destroy the human race.

VII

IT WAS not till the sixth day of the interplanetary trip that trouble started.

Despite its automatic controls, the ship seemed unable to stay on its course. Time and time again, rocket shots on the side of the ship would point its nose toward the point in the heavens that determined the ship's course. But, as

though an invisible hand were drawing it away, the ship seemed to turn about, or as one of the Conquerors expressed it, "the heavens seemed to swing around to the left."

The spectrum from Venus, however, continued to show the presence of element eighty-five.

With the greatest difficulty Whitland and the other Specialists put into operation a second telescope with spectroscope attached and began to make observations of the light entering the car from other directions than Venus. Window after window was used as an observation point, but in every case a familiar spectrum was obtained. It became harder all the time for the robot pilots to keep the space car in its proper course. Several times it was so far out that it became necessary to fire a lateral rocket for a ten minute period to shoot the car back to its correct course.

After thirty hours of patient observation Whitland found what he was looking for—a new spectrum—and there was no question that it represented the element with atomic number eighty-seven. It was also easy to tell where the light forming the new spectrum came from. A fine spectrum was obtained when the auxiliary telescope was pointed directly at Van Maanen's Star.

There was something in that ray of light from that far distant globe that kept pulling the space car away from its course and into a direct line with the star, which was also in line with the sun. Perhaps, thought Whitland, the threatening star might even be a super-gravity attracter that would pull the car off its course so far that it would become lost in space or plunge into the sun.

The Directing Intelligence was called into consultation. As usual, Whitland acted as spokesman. More and more he seemed to be recognized as the leader of the intelligentsia on the space car.

"The trouble," began Whitland, "is caused by a star called Van Maanen's Star, named in honor of the celebrated astronomer who discovered it. Yes, we have known of that star for years, and we thought we had its spectrum—but—and here's the rub—the most vital of its rays must have been shut off from our telescopes by its blanket of atmosphere. On Earth we could see it but very faintly. In luminosity we considered it one of the faintest of stars, having but one six-thousandth of the light of the sun. Yet it has a surface temperature of seven thousand degrees; so we have calculated that it must be a trifle smaller than Earth, probably only one-hundredth the diameter of the sun. One million such stars could be packed inside the sun and still there would be some spare room.

"Though it is slightly smaller than the Earth, it weighs one-fifth as much as the sun does. This means the average ton of matter is packed into the space of a cubic inch. We feel that matter is packed rather closely in the Earth, but the atoms in this star that is giving us so much trouble are packed to a density sixty-six thousand times as close.

"Much of this star—not all of it, but evidently most of it—is formed of this new element, number eighty-seven. Without doubt this star has powers which up to the present time have not been suspected. Evidently for millions of years it has radiated a queer sort of energy that exerts a serious effect on our instruments and observations. I do not know what happens to them, but we may know if any of us are alive when our space car gets to Venus or falls into the sun. For the truth is that our course is being diverted to the left, in other words toward the sun. That means that Venus will pass us before we get to her and unless we can check our speed, there will be nothing to prevent a plunge to the sun. No doubt we shall be simply a mass of incandescent metal before we hit!"

"How far away is this dangerous star?" asked one Co-ordinator.

"Probably many, many light-years."

"And Venus—?"

"Is about eight days away."

THE Aviation Specialist had spent many years of his long life in constructing the machinery of this space car. It was his child and he had faith in it. He spoke up now.

"Then we will fight this danger! We will put all the available power to work through the end rocket tubes and at the same time we will start as many of the steering tubes on the right side as necessary. I am not sure how much power we can develop in those side tubes, but at least we can try. I am going up to superintend the machinery personally. Keep me informed as to the progress we are making, for I don't want to use any more energy than is absolutely necessary."

And then began one of the strangest battles that time and space have known. On one side, a mighty star, ceaselessly pulling a little midget toward it; on the other, that little midget, the space car of the Conquerors, fighting minute by minute, hour following hour, to pull back from the threatening doom and hurl itself forward on its true course. Breathlessly the observers looking through the telescopes saw the heavens swing back and forth, as though they were on a pendulum. Long hours passed, yet each of those hours was bringing the voyagers nearer to Venus! At one time the pull of the star was so strong that the nose was pointed directly toward the sun.

The Director of Intelligence phoned down to the Governing Room, "Have you any more power?"

"Yes. I have two side tubes that I have not used."

"Use one of them!"

There was no appreciable change in the course. Eternities passed as the clock ticked off five minutes.

Then, "Use the other tube!"

If this failed, their last hope was gone.

But it was enough! Nothing to spare, but enough! Slowly the heavens swung about, the nose of the car gradually turning toward the point where the meeting with Venus was expected. A whole day passed. Then, as an experiment, some of the side power was checked. It was found that it was no longer needed. Finally only the four end tubes were in use.

David had again won out in the age-long battle against the giant! The little space car had been able to resist the threatening doom and was once again safely on its path toward the "evening star."

Five days had passed unheeded in the struggle. During those five days the leaders had gone practically without sleep.

On the twenty-third day of the trip nine-tenths of the power was shut off. It would have been disastrous to enter the atmosphere of the "evening star" at the speed which the usual space body makes as it hurtles through infinity. Even with this reduced speed, the end of the day brought them so near their objective that the planet, veiled with mists, loomed to a third the size of the moon as seen from Earth. But now Venus was seen as a silver crescent. The sun's rays, reflected from this opaque mirror, came back with dazzling intensity through the windows of the car. The heat was growing more intense. Even the careful insulation planned by the builders was almost insufficient to prevent suffering. The air in the car seemed vitiated, hardly able to maintain life.

It was a period of the greatest anxiety for the three representatives of the Middle Men. The Conquerors met each new difficulty with their usual unemotional stare, but the Directing Intelligence confided to Percy Whitland that he regarded the next forty-eight hours as fraught with the greatest danger.

Through the telescope they could now see the great mountain peaks of the South Pole looming through the dark

mists. The spokes of the planetary wheel were visible through the swirling vapor.

"My suggestion," said Whitland, at the end of the twenty-fourth day, "is to slide into the atmosphere at the slowest possible rate of speed and at an angle as acute as possible. This will allow us to come close enough to the surface to obtain sharp geographic details

PROGRESS NOTE

PERSONS timid about air raids can be reassured by a new bomb window announced by Pittsburgh Glass. Even a close explosion will not blow these new windows into your face. They consist of three layers, the outer of glass, the middle of plastic and the inner of four triangular pieces of glass, like wedges of pie, meeting at the center. The center sheet of plastic comes past the glass and is fastened to the window frame to act as a hinge.

A heavy "shove" of air, which may break the outer glass, will push in the plastic and the pie segments will then open on their hinges like doors. When the pressure is removed, the plastic will go back to shape and the sections of inner glass can then be taped in place until the window can be repaired.

which we must have in order to select a safe landing place. Of course, it would be death to land anywhere on the dark side, and equally disastrous to fall into the desert. The only safe place is in the narrow zone of perpetual twilight, where the maximum amount of water is."

FOR many hours the gravitational pull of Venus had been drawing the space car toward her surface. The time came when all propulsive power was shut off and every rocket brake at the front of the car had to be turned on to counterbalance this pull. At last the momentous instant was at hand when the car slid into the atmosphere of the unknown planet. Sliding sidewise into it, they were slowly enveloped in swirling mists, which hung around the car with long streamers as though trying to lure it down to an easy death. One mile—and two—and five—they descended, as slowly as possible, until at last they could see a wrinkled landscape some five miles below them—a parched, senile, atrophied land, swept clean as a parlor floor, polished with the dust storms of endless ages, a land on which nothing, not even one-celled organisms, could survive.

Whitland's calculations made him certain that the part of the planet on the sunward side of them was at that time swinging a hundred miles toward the sun in the peculiar movement known as oscillation. He concluded that the sunward side was the choice position for a landing. Propulsive power was slowly turned on, and the silvery visitor sped over the desert of death like a living thing frantically endeavoring to escape a certain doom. Slowly they saw a gradual change come over the details of the landscape. First came steaming mud flats, where the eternal conflict between heat and water was going on as it had been doing for eons past. In the course of a thousand miles more of travel these mud flats changed to rivers, banked on either side with green fields and later lofty forests. At last, as far as they could see, there were rivers, very wide and swift, and forests, dense and green. Visibility was perfect.

The adventurers were now a mile above the surface. Two problems had been claiming their attention; the selection of a landing place and the composition of the atmosphere. There was little doubt as to the presence of oxygen. If those great masses of green below them were trees such as grew on Earth, then they were constantly throwing off oxygen, and in that oxygen men could live. At the same time, it was felt necessary to determine its percentage, and ac-

cordingly, at five different times specimens of the air were obtained and examined. So nearly like the air of the Earth was it that when the car reached a position one-half mile above the surface, the windows were cautiously opened and the interior of the car ventilated. Instantly the new air restored the vitality of the passengers who had for days breathed chemically purified air. One of the dangers was thus passed, one of the questions solved. It was now definitely established that Venus's atmosphere would support animal life.

But where would the space car land? The answer was at hand. Slowly there loomed into sight a white spot, almost a perfect square, which later on proved to be a marble pavement. While the forests were dense on all four sides, vegetation had failed to obtain a footing on the tessellated floor. It offered a perfect landing field, so perfect that it seemed made for the purpose. Lower and lower swung the car, until at last it dropped like a feather and almost noiselessly came to rest.

The adventurers had reached their objective. That part of the journey, at least, was over! Man had once again achieved the impossible! Space, twenty-six million miles of it, had been conquered. The long journey was at an end.

Carefully the side doors were opened, ladders lowered, and a few of the passengers allowed to leave the space car. Meantime all was activity inside the car. Supplies had to be selected, weapons overhauled and prepared for any eventuality. It was impossible to tell what the life on this world would be like, and still more impossible to foretell whether or not it would be friendly. The Conquerors were determined to be prepared for any eventuality.

For defense they relied mainly on their electric torches. Sir Harry had his two revolvers and an adequate supply of ammunition. But the invaders hoped that there would be no need of fighting the life on Venus. They believed that the intelligence of the race that had communicated with them would be so high, their type of morals so lofty, that an easy rapport could be established. This voyage was not one of conquest but of exploration. There seemed no reason to doubt the friendliness of the beings that had sent the two messages, one of advice and the other of warning.

OUTSIDE the space car all was calm. The gigantic forests grew on all sides of the platform, the trees rearing their individual heads so high that the marble area almost seemed like the bottom of a deep well of verdure. There was no sound, either of bird, beast or insect.

"This is the stillness of death," whispered Percy Whitland to Charlotte as they stood in the soft glow of the perpetual half-light.

Sir Harry, strolling up to them, overheard this remark. "My word!" he exclaimed. "It may be still, but I don't feel that it's safe. Whenever I was exploring new territory on Earth, I always dreaded a complete stillness. It always preceded an attack from the savages. When the native is happy and care-free, he is chattering and his tumult wakens all the little things in the forest; but when he is silently approaching to attack, his stillness seems to affect all the other forms of life and they keep still with him.

"Look at those trees! Like nothing I've ever seen—more like giant ferns than oak or pine. They could conceal ten thousand creatures and we would be none the wiser until they started to rush us. I've just had a talk with the Directing Intelligence. It's over eighty thousand years since a generation of Conquerors have been forced to fight for their lives. I'm not sure how much vigor they would be able to put into a real fight with the lower forms of life."

"But maybe there aren't any lower forms of life here, Harry," said the little white-haired woman.

"Lower or higher—it makes no difference. They're all dangerous till they're proved otherwise. Percy, have you noticed this floor we are on? It reminds me a little of the floor of a Maya citadel I once saw in Lubaantum. Only there you could see the joints between the stones, though they were fitted so closely together that I couldn't slip a knife-blade in between. But here there seem to be no joints. It appears like one solid mass of cement which has been highly polished by the continuous wind. Later on, when the water came, the forest grew, but the vegetation was never able to obtain a footing here; there are absolutely no crevices."

"What do you suppose it was for?" asked Charlotte.

"Hard to tell. Perhaps a place of worship, or a platform for astronomical observations. They may have used it as a foundation for a fort or even a landing place for aircraft."

The explorers at once realized that in their new surroundings there would be no darkness or night. The soft glow of the sun always remained of the same intensity. Orders were at once issued, setting aside a certain portion of the twenty-four hours for rest and sleep. A daily routine was established and each of the adventurers was assigned definite duties with the exception of the woman.

Miss Carter was completely ignored by the Conquerors. They never noticed her, never spoke to her, and seemed to have completely forgotten her existence. She never complained, but when Sir Harry was forced to spend more than the usual fraction of each day in consultation, she would address him as Sir Harry in a rather formal tone. Whereas she had been one hundred per cent scientist when she first met the tall Englishman, she was now rapidly changing to one hundred per cent woman.

She briefly announced her disgust with the entire situation one day. "If we were in an unknown territory on Earth," she protested, "we would at once start to explore the surrounding country for at least a hundred miles in all directions. Instead of that, you men or creatures or whatever you are seem to be content to sit timidly here on this marble platform and wonder what lies hidden in that fern forest. I'm sick and tired of it! Nothing but plans and consultations and surmises. I'm going out and start something."

"Now, Charlotte! You're going to do nothing of the kind."

"*No?* When did you have the right to order me? How dare you order me! I'm on my way, and when you next hear from me I'll have some real news."

"But Charlotte! Do be reasonable! Who's going to darn my stockings for me if you go off like this?"

"I'm tired of darning your old stockings," cried the woman, as she walked rapidly to the edge of the snow-white platform, and disappeared among the shadows of the ferns.

Sir Harry looked anxiously at the place where she had disappeared, and then started to go after her. But he was too late. A shrill cry of fear rose through the forest, a single cry from a woman's throat—then silence. And this time the silence was all the more terrible because of the fact that it had been so completely broken, if only for a second.

The Englishman started to run into the forest, then thought better of it and ran toward the space car to get his revolvers. On the way he almost knocked down Whitland, who was in one of his usual arguments with the Directing Intelligence.

"What's the matter?" he asked. "What's your hurry?"

"Matter enough! Charlotte's gone into the woods and something has caught her! Didn't you hear her scream?" and he dashed up the ladder into the space car. A few minutes later he dashed out again, buckling his ammunition belt around him as he ran.

The Directing Intelligence turned his

body slowly, so he could follow the course of the running giant. He commented on the incident to Whitland. "I like that Middle Man in a way. He has been of some help to us, but I've never been able to understand his reactions to that thing he insisted on bringing with him on this trip. He evidently has no real need of her; yet he insists on having her around all the time. Now he's acting most peculiarly. Why not let her go?"

VIII

CHARLOTTE had gone into the fern woods with no thought of danger. She was angry. She kept on because she did not want to acknowledge that she was wrong or afraid. Hearing a noise, she turned, felt something fasten on her throat, screamed once, then lost consciousness.

When she came to, she had a feeling that during her period of stupor she had been carried many long miles into the depths of the forest. She had no way of telling how far she was from the space car, but she feared that she would never return. Glancing around at the strange living things that had captured her, she was more convinced than ever that she was hopelessly lost. She would have taken her chances with savages, or might even have had some hope of escape if she had been captured by animals, but these weird things that stood in irregular rows around her were neither man nor animal, were like no life she had ever seen before. In some ways they all looked a little like the men and women whom she had known on the earth, but they were different. Here a limb was so enlarged that the rest of the body seemed pitifully small; there a feature was entirely eliminated. Some were short and others drawn out to the thinness of a pole. Faces were changed, torsos distorted, duplicated, and even tripled. There were beings with duplicate faces, and others with no face at all, but simply a single eye staring out of the chest, lidless and motionless. On one side stood a body on six legs, while near it stood a body with no legs, rolling as it moved over the ground with a certain clever agility. A thing that was certainly feminine held something to her breast with arms scaled like the trunk of a serpent. Close to Charlotte was a body beautifully formed with the head of a pig and only one leg.

Charlotte shuddered and shut her eyes. She shrank screaming as something touched her shoulder and passed over her face. "Venus?" she asked herself. "If these are the inhabitants, what a strange name for them! The Venusians should be like Venus, the goddess of beauty. Here nothing is beautiful. It's like a page from Dante's *Inferno*, the hallucinations of a man in delirium tremens. It makes me think of the description of the people Lucian saw in his fanciful trip to the Moon, Lucian who wrote 'about such things as neither are nor can ever be.'

"I am asleep!" she cried. "When I awake, I shall be back in my cabin—darning stockings and Harry will drop in and tell me about the last consultation he has had with the Conquerors and Percy. I will tell him about my dream and he will laugh at me and say, 'My word! How odd!' and we shall both laugh because it was just a dream." Then she opened her eyes and screamed again, for a thing that was a man above and a long snake below had come up to her and was putting out a hand to touch her.

Once again merciful nature forced her tortured mind to rest in unconsciousness, and this time when she awoke she was alone. Someone had prepared a bed of fern leaves for her to rest on, and had placed near her some fruit and a metal vessel filled with water. As she ate her meal, quiet and cautious observation showed her that she was being watched by a hundred pairs of eyes.

The things could evidently move silently through the fern wood. It mat-

tered not whether they had no legs, one leg or many legs; they were noiseless if they wanted to be. But, even as she was thinking how quiet everything was, they all started to laugh, and that laughter was like the ghoulish shrieks of maniacs hurled over the mouth of hell. Far away the echoes resounded, making all the more terrible the inhuman shrieks of pandemonium at play.

Charlotte did not have to wait long for an explanation of this laughter. The things drove into that circle something that had once been shaped like a woman of the earth. But in every way possible that body had been cut and bruised and broken, without killing the individual or destroying her power of suffering. Not an inch of her body had not been tortured during her captivity. Now they drove her into the ring for the final act of the drama; and because of the anticipated pleasure they laughed, emitting shrill shrieks of explosive respiration that sounded more like the cries of hyenas. They closed in on the thing that had once been akin to humanity; closed in on her, and over her, till Charlotte could see nothing but a struggling mass of abominations; and when they slowly tore themselves apart and once more stood separate, the woman was gone, but blood dripped from the mouths of all who had been fortunate enough to partake in the feast.

Then, as though excited by their blood lust, they started to narrow the circle around the earth-woman. She knew what was going to come and she sent a prayer through the air. She knew the hopelessness of it, yet she sent it—to the only man she had ever loved enough to darn his stockings.

Just at the last second, when she knew there was no hope, a strange thing happened. The abominations started to drop! They dropped and died, moaning weirdly, perhaps as unable to understand the reason for their death as they had been unable to understand the why of their living.

And from that circle of death, an oddly-shaped creature stepped forth and spoke to the woman in perfect English.

FOR the first time in his life, Sir Harry Brunton had undertaken an exploration into the unknown without proper preparation. But when he saw Charlotte striking off alone into the unknown without a companion, and realized that he was partly responsible for her action, he was beside himself with fear and anxiety. He regretted the moments he had lost in going back for his revolvers; yet in spite of his panic and haste, he knew that he ought not to go into the gloom without them. With the exception of these he took absolutely nothing with him.

He dashed into the depths of the forest. Although the sunlight shone mellow and warm on the marble landing-field, it was hardly sufficient to penetrate the thick, interlaced fronds of the gigantic ferns. More than once he

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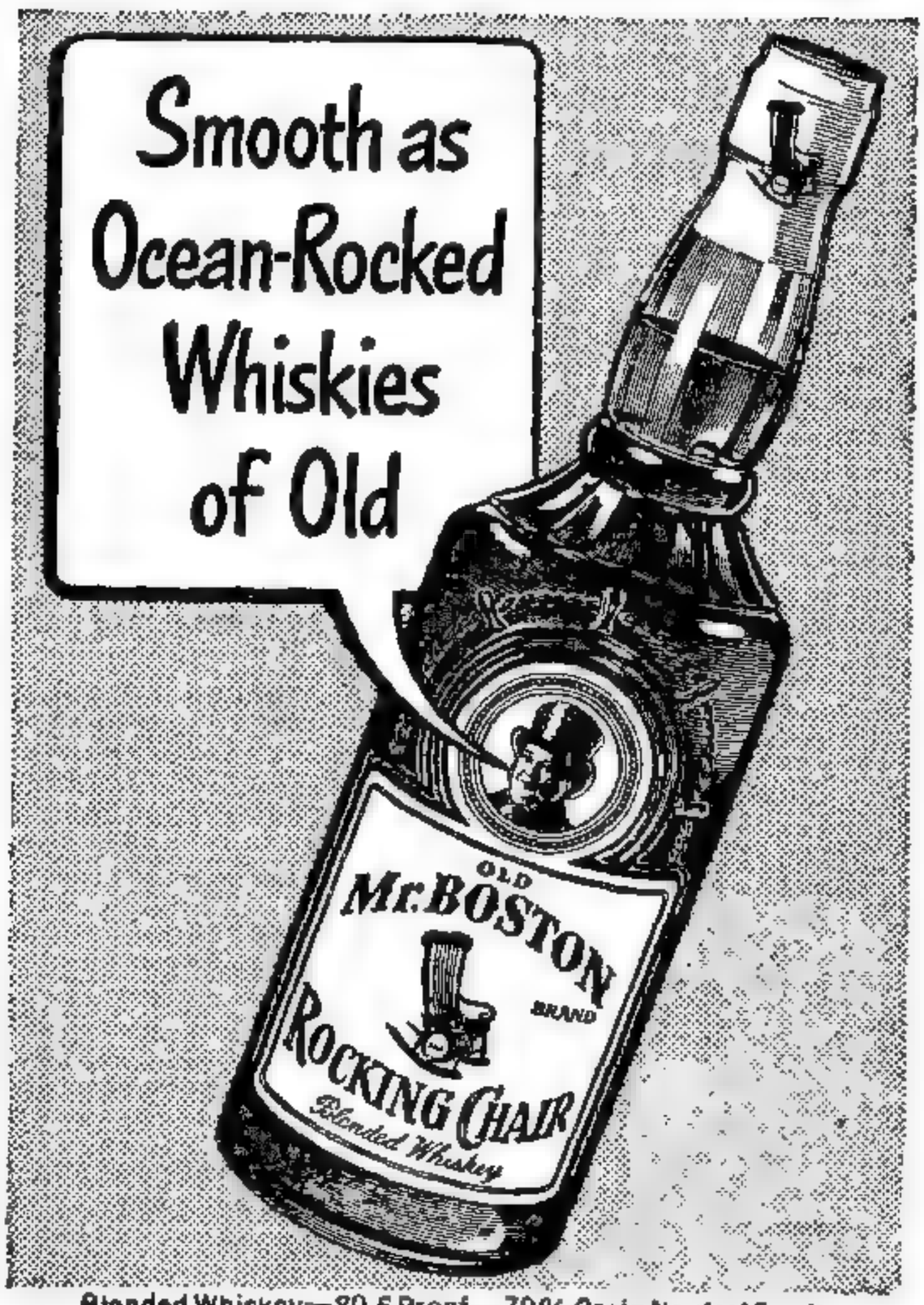

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stumbled over a root in the semi-darkness and came near being thrown to the ground. In some places the ground was smooth and hard; in others, the leaves of centuries formed a soft blanket into which he sank up to his knees. There was no noise except the constant rustling of the wind-swept fronds a hundred feet above the ground. He pushed on and on, pausing now and then to call the name of the woman whom he had loved and lost. Then he struggled on again. Finally he sat down breathless to rest. By force of habit he pulled out his watch and saw that he had forgotten to wind it. Then he laughed as he realized the meaninglessness of the old measure of time on this new world. The position of the sun was of no help either, for it shone with the same intensity continually. And then Sir Harry realized that it would be hard for him to orient himself by the compass and perhaps might be impossible for him to find his way back to the space car.

"My word!" he exclaimed to himself. "That's what love does to a man!"

He decided to wind his watch, start it at 6 P.M. and try to secure some sleep. He intended only to rest an hour. When he awoke it was six o'clock again, either twelve or twenty-four hours later. Cursing, he realized that those lost hours might have saved Charlotte if they had been rightly used. Drawing his belt tighter, he started out on his apparently hopeless search.

He pushed on at an uneven pace for some hours. Then, suddenly, he heard her calling him—not in a real voice, but vibrations impinging on his higher psychic centers. She was in trouble, in danger! Death faced her, and he could not help! He could not even be with her so they could die together. Frantically, he started to run—calling to her, telling her he was on his way, that he was near her; he ran till his breath came in great gasps, ran till fatigue forced him to walk, walked till he stumbled and fell into a great oblivion.

When consciousness returned, he saw that he was no longer in the forest. Above him sunlight fell through thick glass windows. Around him were tables and chairs, and the walls were lined with shelves. He felt around him with his hands and found that he was on a thick rug. Hastily he sat up and looked around the room. Marbled walls curved upward to join a ceiling composed of alternate segments of marble and glass. It made him feel as though he were at the bottom of a hemisphere or of a large inverted cup. The air was warm and pleasantly perfumed. On all sides the strange furnishings pointed to refinement and culture.

Then, as he continued to make a rapid inventory of the room and its contents, he saw something seated at a table. It required some moments of concerted observation to satisfy the Englishman that it was alive, and far more time than that to figure out just what form of life it was. Sir Harry had been accustomed to associating the highest type of life with the human body. His contact with the Conquerors had taught him that this human body could be changed in a thousand details, and yet, even as in the case of the Conquerors, be but an advanced type of the human race.

BUT this thing that rested on the chair seemed to be simply a sack, a sausage, covered with a thick skin. There was no head, there were no extremities. Thirty inches long, twelve inches wide, it was devoid of curves except for a gentle rounding of the top. At last Sir Harry satisfied himself that the entity exhibited a slight movement, a regular pulsation sufficient to cause an alternate enlargement and shrinking of the entire body. Slowly rising to his feet, the Englishman walked cautiously over to the chair. As he walked, a sphere budded on the top of the strange being; it swelled rapidly and in the process developed something that looked like an eye. At the same

time another bud on the right side grew into a pseudopodium* that might be considered to resemble an arm. Two more extremities burst forth at its base, and it jumped off the chair and spoke.

"Do you feel refreshed from your sleep?"

The words were English, the pronunciation almost perfect and the words rather softly intoned. The voice came from a slit in the thing that might be considered a head. Sir Harry looked at it in astonishment, for the moment too dazed to reply.

"My word, yes!" he said finally. "Have I been here long? Have you any idea how I came here?"

"My Master will tell you everything. I was to stay here till you awoke. Perhaps I will be your servant. All of the Old Ones have servants. You look like an Old One. It was the resemblance that made the Master dare to bring you here."

The thing moved out of the room, and as it did, the new arm shriveled until it re-entered the body, leaving no sign that it had ever been there.

Sir Harry wiped the sweat from his brow.

"New forms of life! My word! I should say so. That thing can move and talk and act like a faithful watchdog, and yet where does it fit into the scheme of zoology? Man, animal, or homunculus?** First it is a sausage, then a headed cyclops without legs or arms, then an arm or two legs sprout, and at last no arm remains. That is *unusual* to say the least. I wonder what Charlotte would make of it?"

The thought of Charlotte recalled his recent hours of tortue. He must go on. Now that he was rested he must again enter the fern forest to find his woman if alive, and bury her if dead. He must thank the person who had befriended him and then leave.

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*A temporary projection of the protoplasmic substance of a cell, used for feeding and moving about.

**A very undersized man or manikin.

If Sir Harry had been forced to guess the shape and nature of this Master for whom he waited, he would have failed, for the sausage thing had prepared him to see something strange and unusual, something weirdly fantastic. To his surprise, however, he saw just another man!

But what a man! A Greek god come to life—a marble statue, carved by Phidias, filled with life, ensouled by a human being. Here was a beautiful body, with long, well proportioned limbs, a head lovely in its shapeliness, covered by a mass of tightly curled yellow hair. Blue eyes twinkled a friendly welcome. He wore golden sandals, purple shorts and a white sleeveless vest with a scarlet monogram worked on it. This was the Master! Sir Harry nearly lost his poise. The man was large, quite as large as the Englishman, but far more perfectly built in every way.

"Do you feel better now that you are awake?" the stranger asked, in English. "I presume you prefer to talk in your mother tongue, or would you prefer French, Latin, or Carthaginian?"

"I slept soundly," the Englishman almost stammered. "It was good of you to bring me here. I was all in, completely done for. You saved my life."

"Yes, it was fortunate that my servant found you. It was strange to find you there, and to observe that you resembled us so closely."

The Englishman smiled. "I guess we must look alike. Good of you to care for me, but if you could give me a bite to eat, I'll thank you and go on."

"Better stay. I have a lot of things to talk about."

"That is just why I must go on. It's just because I talked so much that I am here this minute, and my fianceé may be in need of help or even beyond help—dead. I talked too much and what she wanted was a little more action."

"Was your fianceé a white-haired woman?"

"Yes."

"Well, you can became easy again. One of my race has sent out the message that he has her safe in his house. I don't know the details, but there is no doubt about her description."

Sir Harry walked toward the Venusian, almost shouting. "Wonderful! By Jove! When can we go and get her? Where is she?"

THE Venusian smiled at his eagerness. "I'm afraid you will have to be a little patient. We cannot do things quickly here. In fact, the effort to keep a race alive on this planet is a great deal more of a task than it may be on your Earth. Our race is nearly exhausted by the effort. It is many, many years since a child has been born in one of our families, and were it not for qur servants, we should have been absolutely powerless to prevent utter destruction by our enemies. As it is, we are very few in number—not more than fifty at the most."

Sir Harry was perplexed at this sudden revelation. He showed it in his reply.

"Do you mean that there are only fifty persons living on this planet?"

"I said fifty of *our* race. There are millions of other forms of life, and there are our servants, and some races that live on the dark side of the planet, about which we know little. For thousands of years we have had to battle for our existence, and even now our enemies are occasionally able to capture one or two of us. A very dear friend had his mate taken away some years ago. We found out only yesterday that they had killed her in the usual way. I think that it's going to cause my friend to ease out of this life himself. To explain that, I might say that none of us ever dies a natural death, but now and then something happens that makes life undesirable, and when that happens we feel that there is no disgrace in suicide."

"Only fifty living?" repeated Sir Harry in astonishment.

"Yes. Probably only forty-eight now. Twenty-four men and twenty-four women in twenty-four homes like this. Some of us live great distances apart. The Old One who is now protecting your earth woman is my nearest neighbor, yet the dangers are so great that a journey can not be made without many time-consuming preparations. You must be patient and happy, knowing that she is safe. Suppose we have something to eat? Our food is no doubt different from yours, but it is very wholesome. Will you accompany me to the lower floor? My mate is there, waiting to assist in your entertainment."

"All this is just too fine of you," remarked the surprised Englishman. "May I compliment you on your excellent use of English and ask how you became so proficient?"

"That is easily explained. We have been in communication with your Earth for a long time. Many years ago we learned how to pick out from the endless roar of the music of the universe the sounds coming from Earth. At first these came as a confused conglomeration of vibrations, but gradually we acquired the art of selection. For hours and days at a time we would study one of the languages, Latin or Celt or Chinese. Many of the so-called dead languages of Earth are preserved only on Venus, as you call our world."

"There is another very pertinent question I should like to ask," said Sir Harry. "Your race sent messages to us by radio, in which you made use of many of the old languages. Didn't you know that those dead languages were no longer being used?"

"Not exactly. Our receiving apparatus has not been working very well. All that we were sure of was that for over one hundred years a race of Earth men had been planning to make an interplanetary trip. Their language was always different in some ways from all the other languages used on the Earth and, at times, it did not seem to be a spoken language at all. We believed

finally that the undertaking would soon be started. We wanted to help you to come here; for, frankly, we needed you. We therefore sent the first message. Even then we were not sure what language you used; so we sent it in all the Earth languages we had learned. Is that plain?"

"Oh, quite! At least, it all sounds interesting. What was that Number Eighty-five you mentioned?"

"That's the metal that forms the core of our planet. Many centuries ago, when we were much stronger than we are now, we prepared for just such an emergency. A large area of our mud desert was completely undermined with high explosives. Our idea was to blow the crust off a crater twenty miles in diameter, exposing the radio-active metal. It was our belief that the rays would be powerful enough to break their way through the fog that covers most of the sunny half of our world. After waiting many centuries, your planet finally developed an intelligence sufficiently great to plan an interplanetary flight. Then we felt that the time had come, so we blew off the mud crust. Our plan was very successful.

"We hoped that you would be like us. But—our disappointment was so keen when we saw your shipload that so far we have made no effort to form a liaison with your people. The small men with the big heads did not please us at all. For this reason we decided to let them be the ones to make the first advances. Who are they, and just what part do they play in your Earth biology?"

BEFORE Sir Harry could answer a woman entered the room. Only slightly smaller than the man, she was a splendid figure of health, vitality and beauty. There was a serene calm in her face that spoke wonders for her poise and personality.

"You men have been talking so long that I just had to come up and meet the stranger. You must excuse the Master," she explained to Sir Harry. "He is so thrilled that one of the space travelers is like the Old Ones that he just cannot stop talking to you. Won't you come down stairs and have a meal with us?"

They went down a marble stairway, cut with exquisite precision in the rocky sides of the house. On the dining floor a table was set with some couches near it. Several of the peculiar servants were walking around giving the final touch to the preparations. Against the wall leaned a few more servants, but they were in the stage of collapse. To the Englishman they looked like nothing so much as sacks of flour, held in peculiar smooth bags.

The Master saw the look of surprise with which his guest inspected these servants.

"Are they new to you?" he asked gravely.

"New? My word, yes! I expected to be surprised during this trip, but not like that. I wish Percy were here," sighed Sir Harry. "He is so deeply interested in your planet that he would appreciate all of this. I am only an anthropologist."

"You mean that you study the races of mankind?"

"That's about it."

"Then," interposed the woman, "you certainly ought to be interested in the life on our planet. Some forms may be new to you."

"No doubt they are. But, so far, I have seen none of them. In fact, everything was so quiet around the landing field that we feared Venus had no animal life."

"I don't know why you were not wiped out," commented the Master. "You see, even *we* were afraid of the little men in your car. They talked a great deal about killing, and we surmised that they would not hesitate to kill us if they could. But that was not why the Monstrosities kept quiet. I think they were just trying to overcome their fear of something new. There have been many herds of them gathering. Evidently the news has spread

among them.

"When they overcome that fear, they will attack your car. We feel a certain responsibility about your people, for in a way we induced you to come by indicating that there was life on Venus. At the same time there is something about those little men that makes us wonder if the universe would not be better off without them. They seem to be devoid of emotion. Do they never laugh?"

IX

ONE of the servants ran into the room and whispered a hurried message to the Master. The words were spoken in a peculiar soft language that reminded the Englishman of the sound of a babbling brook. At once the man gave a sharp monosyllabic command in the same language. Immediately, the shapeless sacks leaning against the wall began to bud, throwing out pseudopodia which quickly developed into heads, arms and legs. In five minutes a dozen of the rapidly developed servants stood ready to meet any demands made on them.

The Master slowly rose from his couch, and gave commands with a sharp precision. Servant after servant ran out of the room in obedience to his orders. Again the two men and the woman were alone. The Master smiled at the interest of his visitor.

"It is nothing," he said. "At least, it is nothing to be afraid of. The Monstrosities are making one of their attacks on the house. They have done it a hundred times before and no doubt will do it as often in the future if they continue to live on; and as there are many hundreds of thousands of them, they are not likely to die out. Suppose we go up and look at them through the roof?"

He led the way up the winding stairs. Sir Harry allowed the woman to precede him. Once in the upper room he was surprised to note that it was almost dark.

"I thought the sun never ceased to shine here?" he commented.

"It's shining just as it always does," was the woman's reply. "But there are so many of the Monsters on the roof that they almost cover the glass windows. When they attack, they have only one idea to go through the glass. They can see through and do not understand why they cannot get through. So they crowd over the window section of the roof."

"When our race first began to appreciate the fact that this menace would exist in the years to come, they started to build these houses. There were just as many houses built as there were couples to fill them. We are long lived, but occasionally accidents happen and the result has been that many of the houses are tenantless. The Monsters at once occupy the empty house. Of course, they have no concerted plan. Yet whenever they came upon one of these houses, they make a determined effort to break in. Then we simply let them crowd each other on the roof till they become tired and run off to some other amusement."

"Why don't you fight them?"

"We do, occasionally; but it seems so useless. They propagate faster than we can kill them, and so far we have never dared attack them in their breeding grounds. Someday, perhaps, we may do that. Would you like to examine some of them?"

"My word! You mean alive?"

"No, dead. I have arranged for my servants to attack at the proper time. They will be able to kill a hundred or more before the rest become frightened and run. I guess they have started now. There is more light from the windows. Will you come outside with me?"

He pressed a small brass knob, and a hidden door swung backward into the massive wall. The two men stepped through the doorway to a stone pavement Around the dome there was silence, the stillness of death, while from the nearby forest came the whining of

frightened animals. Many of the servants were occupied in dragging dead bodies to a distance from the house and laying them in rows.

As Sir Harry looked at the things they were dragging, he swayed, wiped his eyes with his hands, and then looked again.

"Am I really seeing those things?" he asked anxiously.

"Are they new biologic forms to you? Haven't you anything on Earth like that?"

The Englishman pulled himself together, and smiled.

"Only in the deliriums of the drunkard or the dope fiend. This—this is all new to me. Should you mind my walking over and taking a closer look?"

"Not at all. The danger is over. I will go with you. Our method of killing is bloodless. We throw a ray into the beings and break up their life cells. They have a million little explosions inside them that tear their cells to pieces, while doing little damage to their bones and skin. So you'll get a very good idea of what they look like."

THE Englishman walked up and down the rows of dead bodies. Now and then he stood still in front of one that was of special interest. At last he could keep quiet no longer.

Whispering, as though afraid that the dead would hear, he said, "Are they all like this?"

"No, indeed. There are almost as many types as there are individuals. Each new mating produces new types. And there were thousands of variations to start with."

"One can't help feeling," Sir Harry said, slowly, "that every one of them has something about him that suggests they were once like— well, like the three of us."

"Certainly! You are right. They are what you call human beings. At least their ancestors were."

"What—what happened to them?"

"That's a long story. Are you through looking at them?"

"Yes, I guess so. I have studied races of men all my life, but I never saw or heard of anything like these things. I wish that I had a camera. Take, for instance, that thing over there without a head, or that other one with at least a dozen heads, and that one with a tail where the feet shou'd be, and the two-headed thing and—let's go back in and shut the door! I feel nauseated."

"All right. If you are ready, we will go in. I will have these bodies destroyed. We burn them, and then, when it rains, everything is washed nice and clean again."

They were back in the domed room. Once again the sunlight was streaming in through the glass windows. The Englishman sank back on a cushioned chair and covered his face with his hands.

At last he shook himself and asked, "Are you *sure* that their ancestors were once men? Real men and women, like you and your mate? Because if men can change like that on Venus, they can change that way on Earth. *If I thought that a fate like that could ever befall my people, I would stop fighting and let the Conquerors kill them now.*

"How did it all happen?" he asked the Master, finally.

"It's a long story," began the Venusian. "In the first place, it will be necessary to go back to the early history of our race on this planet. Gradually our life span lengthened. I believe that the temperature had something to do with it. It was a common thing for our individuals to live for five thousand years. Naturally there was the problem of overcrowding. For years this problem gave us concern. There were endless discussions. At last it was decided that the only way to save the race was to produce artificial sterility in the great majority of our females.

"The scientists of that time thought they could use radium to produce sterility. They had data which they felt furnished sufficient proof of that. A careful testing of all the women was

made, and a hundred of the most beautiful with their men were set apart to develop future generations of the race. All the rest, men and women, were treated with radium.

"FORTUNATELY for our race the two hundred exempt individuals were carefully segregated on this side of Venus. It was at that time that these dome houses were built. All the rest of our race were placed by themselves in wonderful cities. Their pleasures were provided for. Free from the cares of life, they were supposed to enjoy life indefinitely.

"We did not know at that time that radium has a two-fold action. Certain doses sterilize, while other doses simply change the chromosomes.* In the case of these women and men, the chromosomes were altered. When it was too late, it was discovered that instead of being sterile they were giving birth to monstrosities. We believe that the first generation of children were not so seriously deformed as the generations since, but their deformity was sufficient to seriously affect the mental condition of the mothers.

"Think of it! For thousands of years our children had been born beautifully perfect. Now an entire generation of deformed but healthy children were produced. Maternal love, which had hitherto been pre-eminent above all other emotions, was now mixed with horror at the sight of these unfortunate little ones. The older generation became mentally unbalanced through their misfortune. You understand that I am telling you something that no sane person witnessed, and which we can only imagine? None of the two hundred segregated ones knew about it till it was too late.

"The two hundred who had been placed apart from the rest of the race had promised not to interfere in any way with the thousands who had been placed in the Cities of Pleasure. So we never knew anything about it till it was too late! They kept on producing monsters. In their disordered mentality they permitted their children to mate, and with each intermating of monsters the deformities grew greater. They became worse than animals, and they now roam by millions through the livable portions of our planet, while we, the Masters, with our women, live in our domed houses and wage a slowly but surely losing battle against the monstrosities of our own production. I am sure that nothing so stupid could happen on your Earth."

"I am not so sure of that!" replied the Englishman. "By Jove! We are doing the same thing you did. We let our insane and feeble-minded and epileptics marry and produce weaklings and degenerates and cripples, and only here and there exists a man brave enough to advocate the sterilization of the unfit. Our hospitals and charitable institutions are crowded with mental monsters that are perhaps as horrible as those outside. Perhaps we are heading toward the same end."

"At least you are doing it openly, while we were in ignorance of what was happening till the first wave of these products of our misguided scientific zeal struck us. In a week over a hundred of us were killed and eaten, for these animals had reverted to cannibalism. Ever since then the remainder of our race have been engaged in a battle for existence. This tragedy all happened in the days of my great-grandfather. Today, according to my latest knowledge, there are just forty-eight adults left and at the most four children. Intermating produced a real sterility. The end must come soon, unless we can devise some means of destroying the race we helped to propagate. Even then, free from danger and able to go freely through the fern forests, we feel that our existence will soon end, because there seems to be nothing further to live for."

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*The particles in cells of living things that determine the species and sex of an embryo.

X

THE Englishman paced the floor in agitation. Finally he shot over his shoulder, "You might be interested in knowing that they are fooling with radium on Earth."

"Indeed?"

"Yes. I read a lot about it some years ago. Scientists did some work on insects and produced what they called insect monstrosities, with unusual numbers of legs and wings, two heads, and duplex bodies. Why, they are doing with insects experimentally just what you did unintentionally with your fellow men and women. By Jove! It must be a rotten, bally mess you people are in."

"It is all of that!" interrupted the woman. "And that was one reason why we were so anxious to have you Earthmen visit us. We thought you might be able to help save us, since we are so much alike. That is why, when you finally came, we were so terribly disappointed to see those little men, and only one woman. We could not determine just where you and the woman came into the scheme of their social life. We felt that the woman was akin to us. And you are like our men, only you look old; and though many of our men are over five thousand of your years old, none of them shows the signs of age as you do. Perhaps you are much older?"

"No. I am not sixty years old yet."

"That is remarkable. And the woman?"

"She is under fifty."

"And white-haired? It is hard to understand—as hard as are the little men in command of the space car. But perhape you want to stop talking and rest a while?"

"I want one thing," said Sir Harry, in a most emphatic manner. "Is there any way you can send me to the place where Miss Carter is?"

The Master pondered. "Perhaps it might be better to have her come here. Of course, there is danger either way, but I suppose you will want to go back to your companions in the space car."

The woman crossed the room and entered into a lengthy whispered conversation with the Master. He at first shook his head, then nodded assent.

"My mate suggests that you and your woman be given the dome house of the man who has just died. I understand that it is in perfect condition and that there are over a dozen servants. You and the woman could live there and form a part of our social order. We would welcome you and do all we could to make your life a happy one."

"That is fine! I'll do it!"

"If you really want to go to the white-haired woman, I will send you," announced the Master, "but I warn you—it will be dangerous."

MEANWHILE life in the space car was going on, as usual. The Conquerors had witnessed the departure of Miss Carter and Sir Harry with their accustomed emotionless calm. The exit of these two members of the interplanetary expedition made little difference to them. The value of Sir Harry was completely overshadowed by the acquisition of Percy Whitland. They were sure that the astronomer was one of their race, while Sir Harry never was and never could be anything but a member of a race greatly inferior. He had gone into the silent fern forest after that enigma of all ages, a female. Of what use to worry about their absence or to send out a searching party!

Whitland did not comment on the absence of his friends. He realized the uselessness of doing anything to help them. Alone, he could not go into the eternal shades of the fern forest.

It was on the third day of the absence of his friends that the Conquerors caught their first specimen of Venusian animal life. They first saw it walking on the edge of the landing platform in the shade of the outer row of fern trees. They were able to watch it for some minutes without its seeing them, and

when at length it did see them it did not exhibit any fear. A dozen of the Conquerors walked out to the thing and stood around it, and still it showed no fear. It was only when they seized it and started to drag it toward the ship that it began to howl and fight. One of the dwarfs rendered it unconscious with an electric shock, and after that it was a simple matter to carry it to the space car and tie it securely with ropes.

The Conquerors had always been first-rate anthropologists. Although they had destroyed entire nations they had at the same time preserved many remnants of the eradicated peoples in their colonies on the Earth. They felt that this living thing was in some way human. Yet it was different from any human being they had ever seen. It had no language, only inarticulate grunts and screams. One ear, greatly enlarged, occupied the usual position on the left side of an abnormally small head, while the other side was perfectly smooth. Six arms flourished instead of two, and the trunk ended in what looked like a single leg but was actually two legs fused. If this was a sample of life on Venus, it certainly was different from anything they had expected to find.

They examined it and studied it for a whole day. Their Specialists took blood specimens and made X-ray pictures. They discovered two sets of bones in the lower single terminal of the body. When they had found out all they could about the thing alive, they proposed to kill it and dissect the body. Their Specialists in Anatomy and Pathology said rather coolly that the study could only be completed by an autopsy.

The decision galvanized Percy Whitland into action. Deformed, and with an inferiority complex resulting from that deformity, he had the greatest sympathy for the oppressed and weak. He saw that this thing, this representative of life in Venus, was only an animal, perhaps lower than an animal; yet there was something in the way the eyes looked at him that appealed.

The monster was horrible enough, to be sure. Every time Whitland looked at that combination of horrors grouped together to make a single body, he became nauseated. But when he looked at those eyes, he felt a great pity surging over him. There was something in its eyes that made him feel that long centuries ago the ancestors of this thing had been the possessors of souls. When he heard the final decision to kill the captive, he became furious. He at once sought out the Directing Intelligence.

"I would advise you to let it go!" he cried. "Having liberated it, you leave matters as they were. If you kill it, you may bring down on your head thousands of its race, bent on revenge."

"That is really what I want to do," announced the leader of the Conquerors. "If we liberate this one, he will disappear and we may have to hunt for days to find another, but if we kill this one out in the open where they can see us, they may lose their caution and attack us. That is just what I want. If we can kill several hundred of them, they will be so afraid of us that we shall be able to travel anywhere in safety. We have found that the only way to be safe with lower races is to make them fear us."

"But suppose they don't know what fear is?"

"So much the worse for them and so much the easier will it be for us to destroy them."

"But why do you want to destroy them?"

"That is our plan of action. We have done it for eighty thousand years and we shall keep on doing it. We may take some of them with us when we return to the Earth. But why let the rest live? Of what use are they?"

"Frankly, I don't know. But I have always opposed useless and unnecessary bloodshed."

THE Directing Intelligence looked at him calmly, as though trying to read his mind.

"At times, Whitland, you seem to re-

act more like a Middle Man than a Conqueror. Had I not personally seen that you had ichor in your veins instead of blood, I would feel that you were simply a misshaped Middle Man instead of a member of our advanced race."

"You can consider me any way you wish," replied the astronomer coolly. "You asked me to join you, and I came because of that invitation. It was you that suggested that I was more of a Conquerer than a Middle Man. I have been of help to you in making this adventure a possibility and I think you should listen to me. Do not kill this unfortunate animal you have captured. Let it go. That is my advice!"

"But all of the Specialists are in favor of dissecting it."

"Then all of you are wrong."

"We are superior to any form of life that ever existed. How can we be wrong? I tell you again that we are going to exterminate this form of life, and perhaps the killing of the specimen will act as a bait to draw the rest of the herd to us."

"And when you go back to Earth you will go on with your program to kill all the Middle Men?"

"Certainly. Why not?"

"But why should you? There seems to be room enough for both of the races."

Again the Directing Intelligence looked with unwinking, staring eyes at the astronomer.

"But we have always destroyed civilizations when we felt they had become useless," he at last replied, as though he were trying to explain to a child something that was very simple.

For the first time Percy Whitland was brought face to face with the full significance of what it meant for an entire community to be without emotion. Up to this time the Arizona astronomer had respected the Conqueror's intellectual attainments; now he was forced to acknowledge that intellect without emotion was like a bird with only a single wing—a positive without a negative force to balance it—leaving personalities that were sterile and barren so far as usefulness to humanity was concerned.

He was one against many. Failing in his argument with the Directing Intelligence of the Conquerors, he felt the uselessness of renewing it with the Coordinators or any of the Specialists. There was only one thing to do.

It was the decision of a brave man, ending in the conduct of a fool. Because of his sympathy with a captive that was nothing but a degenerate Monster, the greatest astronomer of his age walked slowly into the fern forest to a certain death.

XI

WHEN Charlotte Carter saw the Monsters die like so many flies sprayed by lethal vapors, she gave one look at the thing responsible for her rescue and fainted. She was by no means a woman of the Victorian age, one of those hoop-skirted damsels who lost consciousness at the least provocation. She had withstood the dangers of the year in Reelfoot Crater and the trip to Venus without once betraying that she was frightened. But to be saved by such a strange creature was just one straw too much for the camel's back.

She regained consciousness to find herself in a large domed room, the exact counterpart of the one in which Sir Harry had awakened. While the furniture and draperies were of strange materials, there was a harmony, a symphony of shape and color that was extremely restful to her tired senses. A tall, beautiful, almost god-like man was resting near a table that had on it an exquisitely shaped glass vase. A stillness filled the room that was greater than any quiet she had ever known.

"I am very glad my servant found you," the man said quietly. "We were hunting for my mate. We came just too late to help her, but fortunately in time to save you from a like fate. Are you

the woman who came with the Earth people in the space car?"

"Yes, I'm Miss Charlotte Carter."

"It was very foolish of you to venture into the fern forest alone. We never go except in force. Of course, our servants can kill many of them, but at times, when they come by thousands, even our servants are overwhelmed. This time there were only a few of them, and when I saw that you were in danger I ordered my servants to rescue you. We brought you to the house of one of my race. My own home is too distant."

"And the peculiar-looking thing that saved me was your servant?"

"Yes. There he is over against the wall."

Miss Carter looked over but saw only a sack-like body leaning against the side of the room.

"But this thing that killed those horrid animals had arms and legs and a head!"

"I know. He was active then. Now he is in the resting stage."

"What is it? I must confess that I never saw anything like it."

"That is because you are from the Earth. Many years ago we had a terrible catastrophe, during which our race nearly became extinct. We were left so few in number that we decided to try to supply the lack of man power by mechanical servants of some kind. It occurred to us to try the intensive development of some of our plants. The more we studied them, the more we became convinced that the main difference between animals and plants was the presence of a higher mental consciousness on the part of the former—what is called in your language, the soul. By selection and intensive breeding, we developed a species of plant with a highly organized nervous system.

"To make a long story short, we had at last a plant which, dormant, measured nearly three feet in height, a foot in thickness and a foot and a half in width. By a system of pneumatic sacks, this dormant plant could throw out pseudopodia which we gradually developed to look very much like the human extremities.

"Of course, all this took time. There were discouragements—many of them—especially when we tried to secure coordination between the mouth slit, the air sack in the upper body, and the nervous system. But at last we had a plant that could talk and that could even learn a vocabulary in other languages.

"But here come the Master of the house and his mate. They will want to greet you."

Charlotte arose to meet the newcomers. She was astonished by their perfection of body and the clear calm of their faces. She shyly expressed this wonderment.

"How kind of you to offer me the shelter of your home! We were so anxious to meet some of you, but when you did not come near us, we had to come to you. We had no idea you were so lovely and lived in such perfect houses."

THE woman smiled. "You are lovely yourself. Your name? Miss Carter? What does the Miss mean?"

"I am not married," —then seeing that the word was not understood, she hurriedly added, "I mean that I have no man."

"You poor thing," cooed the woman. "At your age and no man? Why, all of the woman of my race are mated. Have you no one?"

"Yes, there is a man, but we have never found a minister. Sir Harry wants to marry me and we are both foolish over each other, but we can't marry without a minister."

"Is this Sir Harry the big man of your party?" asked the woman's mate.

"Yes. He is as big as your men, but not so young."

"He must be the one they picked up in the fern forest. He evidently came into the fern forest hunting for you and lost his way. But he is safe with

some of our people who live some distance from here."

At this point the Venusian whose servant had rescued Charlotte interrupted.

"If your Sir Harry is safe, why not live together? I have a dome house three days' journey from here. I offer it all to you, Miss Carter. You and your man can live there in comfort. I believe that you and the man you call Sir Harry would be far happier in that dome-house by yourselves than if you were to remain with the dwarfs."

Miss Carter was visibly embarrassed. "You are very kind—but we simply can't do it. I tried to explain to you that we are not married."

"We can't understand that word. We live together."

"Well, we simply can't do it. It's lovely of you to offer us a home, but I will thank you just as much if you will make it possible for us to return to our cabins in the space car."

The Venusian who had lost his mate stood up.

"If that is your decision," he exclaimed, "then I will assist you. First, we will join the big Earthman and then travel to the car."

Just then the Master of the dome-house walked over to a little red box and picked it up in his hands. He held it tensely, with eyes shut. When he placed it back on the table he looked worried.

"I'm afraid you will never be able to go back to the car. The Monsters are gathering around it from all parts of our land. The members of our race report that our enemies in large numbers, thousands and hundreds of thousands, are passing the dome-houses, going in the direction of the space car. It would be useless to return till the danger is over. We might possibly fight our way through to the dome-house that is sheltering the big Earthman, but our united strength would not be able to win through to the dwarfs. The Master who is looking after the big Earthman says that he is well. I think that we had all better stay here till the tide of Monsters passes."

"So, my dear woman," exclaimed the lady of the house, "suppose you try to be happy in the thought that your man is safe. Come with me and let me see if we can't shorten some of my clothes so you can wear them. You'll feel so much better after you are bathed and have on clean clothes. I am so much interested in all you say that it will be a constant delight to have you stay with me for a while."

The unhappy Venusian widower took the hands of the other man.

"I am going. I will take a few of my servants with me and leave the rest with you. I have nothing much to live for, and perhaps it would be better to die fighting than to kill myself. Someone ought to warn those dwarfs of the danger."

"I am afraid it will be too late," commented the other man, as he said good-

[Turn page]

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by. "Still, if you feel that your time has come, no one has the right to stop you."

XII

HAVING decided to make a thorough study of the animal they had captured, the Specialists lost no time in going ahead with their undertaking. The Directing Intelligence had been unable to follow the argument set forth by Whitland against the killing and dissecting of their captive. They had always killed and experimented as they wished.

They were not deliberately cruel. But their ideal was efficiency and their one great aim was to add as much as possible to the intellectual attainments of their nation. Whenever they took life, they believed that it was for the advancement of the unit which they were pleased to call their national soul.

So they went ahead and studied this degenerate being whose ancestors had once been beautiful gods. They studied him in every way they knew how, gathered around him on the stone platform. In spite of his cries and howls they kept on; and when he died, they continued the study till there was nothing left except a great many specimens to add to their pathological museum.

Nothing happened—at first. But in reality, there were hundreds of eyes watching, hundreds of ears listening to the cries of their fellow animal and the shrill comments of the Specialists as they went ahead with their observations. Then from the dark recesses of the fern forest came a throbbing, a rhythmic pulsation, and all through the forest the Monsters heard it and started to reproduce the sound. On and on it traveled, through the narrow belt of forest, the living place between the frozen dark and the heat-tortured light of Venus. It traveled till it had traversed the entire globe.

And as each Monster, as every group of horribles, heard that sound, they started to run towards its source. On one leg and two legs and many legs they ran along, some rolling along on no legs. They ate as they ran, they slept when they had to; awakening, they started to run again. Animals would have run for an hour and then forgotten; monkeys would soon have stopped to dig for ground nuts or scratch for fleas; but back of every Monstrosity, far back, there was a consciousness of the solidarity of a human race. One of them was in trouble and they must help.

They had been killed before. They had killed each other. Death was a familiar end, but death had always come with the speed of the wind, the swiftness of an avalanche. The Old Ones killed quickly; there was no time to howl. There was hardly time for even one piercing scream. For some reason now one of them had died in a different and entirely new way. Something had to be done. So they ran ahead to do it.

As they ran they paused now and then to shake a fern tree, which agitated, gave out a peculiar, pulsing, throbbing noise that was different from the sound made when the wind blew. All through Venus the Masters holding their little red boxes, picked up the sound, knew its meaning and realized that the Monsters were gathering around the space car.

Sir Harry and Charlotte, guests in different dome-houses, knew it too. Percy Whitland, walking angrily through the forest heard the sounds in the trees and dimly realized that the scene was being set for a titanic struggle. Every living thing on Venus knew that something unique in the history of the planet was going to happen; every living being with the exception of the Conquerors!

There was nothing unusual in the appearance of the fern forest as yet. The day after the killing of the captive, everything was still quiet. The Directing Intelligence decided to hold a meeting of the entire nation to decide on future plans. They gathered out on the landing platform, for only there could

all come together at one time. The leader briefly reviewed the events following their arrival on Venus. They had made a study of their immediate surroundings, had made one captive of a peculiar animal and studied it thoroughly; and they had lost three of their group, Sir Harry Brunton, his woman and Percy Whitland. He asked the different specialists to express themselves as to what the next stop in exploration should be.

A CO-ORDINATOR arose to speak. But what he said was lost in the sound of a cry from the edge of the fern forest. This cry was followed by another and by a third, till all around the landing platform there was a pandemonium of sounds, all the more terrible because of the complete silence that had been broken.

Then, as though obeying a preconceived signal, the Monsters leapt out of their hiding places and ran toward the gathering of dwarfs on the platform. The platform was large and the Conquerors had gathered only a short distance away from the space car. Had they been active men, accustomed to physical exertion, it would have been an easy thing for all of them to be saved. But they could not run. Their enlarged heads, the seat of their massive intellects, made anything but a balanced walk impossible.

On their side of the car there were four doors, but each of these doors had to be reached by ladders. Around the base of these ladders the Conquerors gathered. While some started to go up the ladders, others prepared to kill. Their electric discharge would kill easily, but it was selective; only one victim could be stopped at a time. Even though the Conquerors seemed small and helpless compared with the strange animals, they had no fear. They had always killed those who opposed them, and they could kill again.

With the animals, it was different. They had learned to know the plant people, the harmless-looking but deadly servant of the Old Ones. Experience had finally drilled into their dull minds that it was best not to venture an actual conflict with one of these servants. But if a Master or his woman was caught out alone, there was only one ending; he was captured and killed. When the Monsters rushed out on the landing platform, they saw a number of the little people who looked as though they might be the children of the Old Ones. They were sure of their victory—and rushed on.

By the time they reached the bottom of the ladders, over half of the dwarfs had reached safety. The ladders were full and around the bottom of each one stood a guard, waiting, ready to kill. And kill they did. From every dwarf who stood on the landing platform darted the deadly Jovian bolt, and for every bolt a Monster stumbled and died. But those around him never knew it. They simply rushed on, up to the Conquerors and over them, and even started to climb up the ladders to the doors that were still standing open.

But the doors suddenly closed—closed even in the face of a few Specialists who had not reached the tops of the ladders. And once they were closed, those Conquerors who had passed in were safe behind thick walls.

The Monsters were vegetarians by necessity and meat eaters by choice. In the world they lived there was food in abundance, but it was not the kind they craved. Occasionally they caught and killed an Old One; sometimes they fought among themselves and ate the bodies of the slain. But this day, as the result of a short battle, they had at their disposal the bodies of fifty dwarfs and over two hundred of their own kind. And the one impressive fact that reached the higher consciousness of the Monsters was this: In that peculiar house there were many more things that could be killed and eaten. All they had to do was either get inside or have them come out.

So they waited. . . . And as they waited, more came. From the North they came, and from the South, through the narrow belt of fern forest, and as they gathered around the car in thousands, they made the place horrible with their unearthly cries. They did not mind waiting—they had nothing else to do. It was satisfactory to know that inside that hut was an abundance of meat—and the meat was not protected by deadly plant servants.

From the windows of the car the Conquerors looked out and made further studies of the new type of life. But this time the studies were made through thick panes of glass.

AS A disaster the experience was unique to the Conquerors. In all their history they had never known defeat, had never been blocked in any of their undertakings—and now in a few minutes they had lost over a quarter of their strength. But with their usual efficiency, they at once started to apportion the duties of the dead men among the living of the expedition.

The next work undertaken was the discovery of some means of destroying the Monsters. Plans were discussed, not from the standpoint of hatred and revenge, but rather from that of efficiency. There was work to be done, and nothing and nobody must be allowed to interfere.

The council of war decided to take advantage of the evident hatred of the thousands of animals milling around the side of the car. They believed the Monsters would follow the car if it moved slowly over the tops of the fern trees. The Conquerors planned to come down to the ground now and then, and in tantalizing manner to allow the Monsters to again surround them. They were going to take the entire race of horribles westward.

It was time for the astronomical phenomenon known as oscillation, to plunge the western strip, one hundred miles wide, back into the utter darkness and intense cold for a four month period.

The Conquerors planned to drift slowly westward in their space car, confident that the Monsters would follow. On and on they would go to the place where the fern trees grew smaller and at last became moss an inch high. Out there in the open spaces, the animals would gather around the car; and there they would be killed by the scientific weapons brought from Earth for that purpose. The Conquerors would kill all they could, and would then drive the frightened remainder in front of them into the darkness. The planet would swing around; for a hundred miles the zero of utter darkness would come—and with it, death from the irresistible cold. Then, with these inhuman enemies out of the way, the Conquerors determined to drift to the east side of the planet for another period of study.

It was a beautiful piece of strategy, taking into consideration every known fact involved, and giving correct values to each. And it worked exactly according to all calculations.

They slowly swung the car upward, and then pointed it westward. Its bottom just cleared the delicate tops of the fern trees. Ropes from it brushed through the branches and were caught at by the infuriated animals who were rendered all the more ferocious through the fear that they might lose their prey.

FORTUNATELY the propulsive mechanism of the car worked perfectly. The psychology worked just as well. At the end of fifty miles of travel westward, the Conquerors found just what they were looking for, another large, white platform. They allowed the ship to settle slowly down on this smooth surface. At the end of a few hours the platform and even parts of the space car itself were covered with the blood-hungry animals. At every possible crack, long, hungry fingers tried to enter and pull off pieces of the

car. Each failure produced greater rage and more noise. Pandemonium of beastly shrieks filled the forest.

Another fifty miles were traversed—and now the fern trees were no longer giants of the forest; they were small three-foot plants. It was no longer difficult to make out the various Monstrosities as they stood among the little ferns, howling their rage and fighting with each other.

A few miles more brought them to the limit of vegetation. There had been

MIRACLE DRUGS

THE wonder of miracle drugs is sometimes only matched by the amazing speed of their obsolescence. Cortisone and ACTH, the only important aids to the treatment of arthritis, are already threatened by a new discovery. As a matter of fact, this is a logical development. Cortisone itself was discovered through the observed fact that women gained relief from arthritis during pregnancy. From this to a development of a serum from the fluids recovered after childbirth would seem to be an inevitable step. Called postpartum plasma, the new drug is said to have no serious side effects, as is true with both cortisone and ACTH.

but little warmth to the sunlight here. Far in the distance loomed the gigantic peaks of everlasting snow, still melting slowly, but almost ready to gain another four months' victory over the glorious sun.

Over all this plain, barren except for moss, still muddy from the thawing glaciers, spread the Monster race of Venus. And the Conquerors, looking eagerly through the glass windows of the car, promised themselves that after the slaughter they would spend some time in studying and classifying the dead things and adding still more to the already great knowledge of their race.

Gradually they allowed the huge car to rest on the mud. Then they waited till they were reasonably sure that all their victims had arrived. No refuge was possible now in the fern forests, no hiding behind the trunks of giant trees. The fight was out in the open; but it was not going to be a fight this time—it was to be a slaughter. The conquerors had learned their lesson and they were going to teach one now to these misshapen creatures.

From every window, out of every door, were thrust the long ray tubes of the car. Slowly they were swung to and fro, and where they landed they killed. Not till half of the victims had died did it gradually seep through the dull brains of the living that this was something to fear. At last they decided to run, but when they did so, they found between them and their former home a long line of dwarfs, each with a ray tube in his hands and murder in his heart. The only place of retreat was the snow-capped mountains, beyond which lay the land of eternal night.

The survivors started to climb the mountains. A few turned back to die at once, but the others, panic-stricken, climbed into the death-dealing snow.

Five hours later the dwarfs, exhausted but victorious, returned to the space car.

But something stupendous had happened. For thousands of years the dwarfs had taken no exercise and performed no muscular work. They had lived and moved, but so slowly that only a minute amount of toxin was formed in the course of the day. Their eliminative organs had adjusted themselves to this small amount. Now, without physical preparation and in spite of their great intelligence, they had flung themselves violently into the task of destroying the Monsters. For five hours they had walked over the plain, carrying their ray guns and relentlessly pursuing

the unfortunate, terror-stricken things to their doom. Muscular work and desire for revenge had generated poisons in their organs in far too great amounts to be eliminated.

The dwarfs did not die, but they returned to their space car the victims of acute auto-intoxication. They shut the doors and, falling on their beds, started to sleep. It was the slumber of intoxication, a coma, a stupor so profound and so prolonged that it closely resembled death.

During that sleep many changes were going on in their highly sensitive bodies. They awoke at last, to be sure, but never did they fully regain their former towering intelligence. They were able to think, but not to perfection; they were no longer demi-gods.

XIII

THE OLD ONES of Venus knew that something stupendous was going on, that an important part of the history of their planet was in the making. They realized that their eternal enemies, the Monsters, were migrating, but they were not sure of the cause behind the mass movement. For the first time in their experience, the Monsters seemed to be animated by a common cause.

The Masters started to communicate with each other. As the hours passed, it seemed more and more evident that a large proportion of the misshapen animals were gathering together. The territory for many miles around the original landing of the space car had become safe for ordinary travel. The Master who had lost his wife wandered through the fern woods for many hours without meeting danger of any kind.

At last the Venusians listened to Charlotte's pleadings and decided to assist her to make the journey necessary for reunion with Sir Harry. This had to be accomplished quickly or not at all. The four months of bitter cold, blizzards, and dark night were near at hand for the western strip of the planet. During these four months it was customary to remain in the dome-houses and wait for the next shifting of the planet. It was nearly time for the oscillation to occur; in fact the movement was slowly beginning already.

So, without delay, the Master and the woman who had been taking care of the white-haired Earth woman started with her on the short trip to the dome-house that was sheltering Sir Harry. The journey was without interruption.

Sir Harry and Charlotte greeted each other with very little external show of emotion. Great as was the depth of their love, they treated each other quite demurely in the presence of strangers. The two Masters and their women looked on the behavior of the visitors with ill-concealed interest and amusement. They could not understand why this man and woman should act so if they loved each other.

The chief topic of discussion was the migration of the Monsters and the disappearance of the space car.

"All that we are sure of," admitted one of the Masters, "is that the car left its first landing place and started to go westward. That was after the battle in which so many of the dwarfs were killed. From observations made by members of our race, it appears that the car was going due west at a low rate of speed, and not very far from the ground, and that the Monsters were following it."

"Have you any way of telling whether our friend, Percy Whitland, was in the car when it left the landing platform?" asked the Englishman, anxiously.

"No. We were able to pick up some snatches of conversation which indicated that he had an argument with some of the small Earthmen, but after that we lost touch."

Miss Carter looked concerned. "You must not get the impression that all human beings on the Earth are like those dwarfs. I think that Sir Harry ought to tell you about that race and everything that happened, leading up

to this journey through space."

"My word, Miss Carter, I can't do that. I'm not an orator. Why, you make me feel like wilted lettuce merely suggesting such a thing!"

Nevertheless, he yielded to her pleading, and for three solid hours the Englishman talked, giving a brief but comprehensive account of the development of human life on the Earth and the ascendancy of the Conquerors.

"That is very, very interesting to us," said one of the Masters. "It is especially so when we realize that our race is directly responsible for all of it. You see, we are so much older than you are that many years ago we tried an experiment. And this experiment of starting life on other planets evidently worked out successfully."

"My word!" exclaimed Sir Harry. "You surely don't mean to tell me it was you people that planted life on our Earth?"

"Yes, I do mean precisely that. Answer me one question. Have any of your scientists any positive knowledge as to how life started on your planet?"

"No. Lots of theories, but nothing that we can be sure of."

"Then I will tell you. Of course, it all happened very, very long ago. We who are now living are very long-lived, yet our life is but a breath compared with the vast ages of life that preceded us on this planet. We have written records engraved on tablets of gold that date back many millions of your years. I have read them, and I think I could teach you and your woman to read them."

SIR HARRY paced the floor in intense excitement.

"Wonderful!" he almost shouted. "Let me see them! If all this is true, I don't care whether I ever go back to Earth! If our people on Earth are safe, relieved of the threat of the Conquerors, all I want to do is to stay here and read those gold plates till I die."

"Is that *all* you want to do, Harry?" asked Charlotte, smiling.

"Well, of course I want you to be here to read them with me, but if you can return to Earth, perhaps you had better do so, for your own good."

"But who would sew on your buttons and darn your socks if I left you?"

"Why, bless my soul, I never thought of that!" He turned back to the Master.

"Tell me about the start of it. Are you sure the people on this planet started life on the Earth?"

"That has been our tradition. I have read some of the very early gold plates, and it seems that our ancestors took the credit for it even if they did not deserve it. Here is the story.

"Go back five hundred million years of your time. We were then a highly intelligent people, scientifically inclined and interested in all the problems of nature. When you visit our museums in the dead cities, you will judge for yourself just what our culture was in those early ages. Of course, we are a dying race now, unable to die and yet equally unable to reproduce ourselves. We live in the past, in dome-houses built eons ago, and surrounded by objects of culture made by dead hands. Even our servants, wonderful as they are, were brought to their height of perfection by remote generations.

"Our astronomers watched the Earth with a great deal of interest, for it was our nearest important neighbor. Of course, Mercury was near us, too, but we felt that we could never become biologically interested in that planet; it was entirely too near the sun. So our ancestors kept on studying the Earth, waiting patiently for the time when there might be a chance of successfully planting life there.

"Your planet had gone through the various stages. First it was simply a large mass of superheated gas, twirling on its center and constantly growing smaller and cooler. Planetesimals in great numbers fell on it, enlarging it and helping the molten mass to form a crust. Titanic mountains rose and fell

again; an atmosphere collected, and from this atmosphere rain fell. The first drops of water were torn into steam before ever touching the earth. But other drops fell. It was the eternal conflict between fire and water. When the heat had abated somewhat, the Earth's surface was covered with huge ponds of water and gradually the oceans developed.

"The oceans and the endless tides! Water pulled into waves by the moon, and waves pulled back into the womb of the sea by the fighting Earth. And when we knew that the water was there, we felt that the time had come for our great adventure.

"I am not a scientist. Some of the words used in the early records are hard to understand, but apparently my ancestors made a study of the phenomena of the single-celled life. Some of these cells were almost ultra-microscopic. While our biologists studied these, other scientists built hollow cylinders and spheres capable of existence in the spaces between the planets. It was all experimentation, but back of it was a desire to start life—our life—on other planets.

"The scientists of Venus kept on, and at last they filled thousands of spheres and cylinders with closely packed little cells. These vessels, containing millions of little lives, they shot out into the uttermost voids of space. For centuries they kept on, hoping against hope that some would fall into the atmosphere of the Earth—would explode there, and liberate their little passengers so that the cells could find a watery home in the oceans of a new-born world.

"WE COULD not be sure, but we felt that some had landed. Eons passed and out of the water, life must have crept up on the sea-beaches of your world. And when that life started to live on the land, the little nervous system of that infant life looked towards the stars and had vague dreams of what it might be in the ages to come.

"The eons passed. Age after age of my ancestors lived and watched hopefully only to die without any assurance that they had succeeded in their undertaking. We had most delicate instruments with which we hoped to hear the transmitted language of the first life.

"At last we heard it—confused roars, snarls, yells of the hunter and the hunted! At last we thought we could pick out something that sounded like speech. Fifteen thousand of your years ago, we heard those first differentiated grunts of what you have called the Dawn peoples. After that the progress of speech was rapid.

"We met with discouragements. We would spend years learning one of your languages, and then suddenly it would cease coming to us. We know now that the particular race had been destroyed by the people you call the Conquerors, the dwarfs that had the intelligence to finally win a victory over space and come to Venus. We knew of their plans, and, as you are well aware, we tried to aid them with our knowledge.

"By this time there were just fifty of us left, just twenty-five couples of the Old Ones. Can you imagine the breathless anxiety we felt as we watched that space car wing its way through untrodden reaches of space, and at last land on our planet?

"We saw the ultimate descendants of the germs we had sent out, returning of their own accord—and what were they? Dwarfs, asexual, ugly—intelligent, but devoid of those emotions which constitute the greater part of happiness. You have told us that they know neither love nor hatred, fear nor passion, pride nor shame. You say that they have made progress upward by stepping on the corpses of inferior nations.

"We cannot feel that such a race should claim kinship with us. We are the Old Ones! We have lived for beauty, for the finer arts of life, the culture and refinement of the soul. You, Sir Harry, are like us. Your woman is like us, in

spite of her peculiar ideas about man and woman and the odd ceremony she calls marriage. We feel that the two of you are in sympathy with us. I believe it was the hope of our ancestors that the Earth would some day be peopled with men and women like you, similar to ourselves in ideals. Could they have looked ahead and seen these one-sided Conquerors, all head and no heart, I feel that they would have left the Earth untenanted!"

"A most remarkable tale," commented Charlotte. "But there is one question I want to ask you. Do these gold plates explain how life started on your own planet?"

"That is something that we do not know," replied the Master.

XIV

IT HAS been said that God preserves children and fools. While Percy Whitland belonged to neither class, he was, in some miraculous manner, saved during the first two days of his wandering in the fern forest. He was either overlooked by the traveling tribes of Monsters or they could think of nothing else but arriving at the gathering-place of the race. He made no effort to conceal himself, but walked on through the fern forest with the same calmness with which he would have walked through the streets of Flagstaff, Arizona. He had only two thoughts in his mind. One was to try and find his friends, Sir Harry and Miss Carter; the other was to cut himself free from any further companionship with the Conquerors. He was no longer willing to live as a member of a race which knew neither love nor pity for lesser members of the biologic world.

Despite his outward calm, Percy Whitland had a feeling that something demanded his attention. Suddenly, like a flash of lightning, it came to him. He stopped walking, sat down on a pile of dried fern leaves, took a pencil and some paper out of his pocket and began to do some calculating. Mathematics was a necessary part of his life as an astronomer. For thirty years he had peered through a telescope at night and solved problems pertaining to the arithmetic of the Universe during the daytime. Few things in life gave him a greater thrill than filling a sheet of clean white paper with rows of staggering figures.

Working out this problem, he lost sight of the fact that he was hungry and sleepy and worried about his friends. He simply knew that there was a problem involving figures that demanded his attention. All else, for the time being, was blotted out of his consciousness.

He filled a page, placed it carefully on the ground and started another one. Several odd-shaped things came near him silently, but he did not seem to see them. Something else came near, so large that the shadow from it fell on the piece of white paper and made it hard for Whitland to see the lead pencil marks.

His gaze was still on his paper when in front of him he half-saw something that looked like human legs, and cried irritably, without looking up, "How do you expect me to finish this problem if you insist on standing in my light?"

NOT TILL he had said the words did he realize the peculiarity of his request. He looked up and saw the shadow-thrower. It was a large man, as large as Sir Harry, but far more beautiful, wearing clothes like the ancient Greeks. Back of him were several odd-shaped creatures. The astronomer remembered that he was first of all a gentleman. He jumped up and started to apologize.

"You must forgive me," he began. "I was so interested in my calculation that I lost sight of everything else for the time being."

"Are you one of the dwarfs?" inquired the stranger.

"No! A thousand times no! They tried to make me think that I was, but

when it came to the acid test, I could be nothing but a plain human being like my friend, Sir Harry."

"So, he is your friend?"

"He is, indeed. He has been that for many years."

"Then you will be glad to know that he and his woman are safe. I just left them a few hours ago in one of the dome-houses. You have been fortunate. At any other time you would have been killed in a few hours, but here I find you absolutely unconcerned, sitting on the fern leaves and doing some sort of problem."

"It is a very interesting one. I am trying to determine just how soon the phenomenon I call oscillation will occur."

"What do you mean by that word?"

"The slight shifting of Venus from east to west and then, four months later, back to east again. I have an idea that the next swing of the planet is going to start at any time. That is what I am trying to determine, but I am afraid I have lost a few days somewhere."

"I can tell you about that. It has begun. In fact, that is why I am out here in the forest. Within not so many weeks all this land will be under a heavy blanket of sleet and snow. These giant trees will be leafless and covered to their tops with ice. For the width of over a hundred miles all will be bleak desolation. That is why I am here."

"I don't follow you. What has that to do with your being here?"

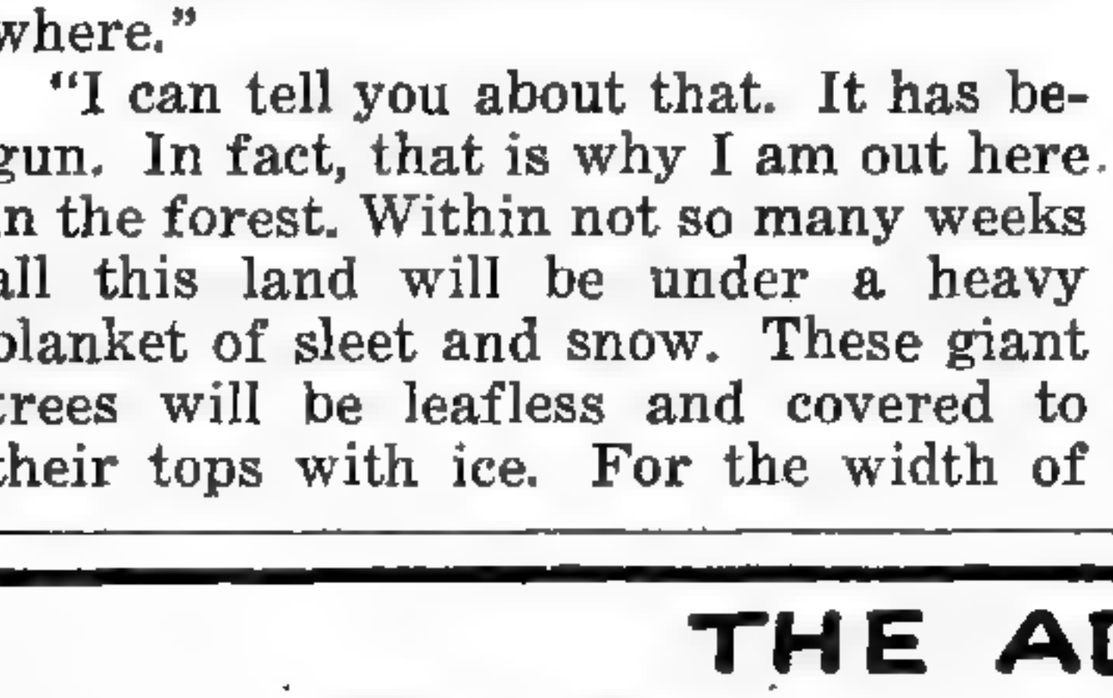
"Some time ago my mate was captured by the Monsters who infest our forests. They killed her. In truth, they did worse than that. Life is no longer worth the living. So I have decided to die. My first thought was that my servants and I might meet part of the migrating hosts and die fighting them. But they seem to have completely disappeared. So, when I found that there was no chance of dying in a fight, I decided to stay out here in the forest till the period of utter darkness and desolate cold should come and I should be buried under a pall of solid snow."

"I am so sorry your woman died," sympathized the little man from Arizona. "I realize that the loss of a loved one must be a very sad blow. From what you say, you expect the change in temperature to come very soon?"

"Yes, in fact it has begun. The western edge of our planet is already swinging into the shadows. Some of my race —we call ourselves the Old Ones— travel from side to side of the planet as the seasons change, but others seem content to live on in their dome-houses, buried under the mantle of snow, until the sun releases them from their frozen prison."

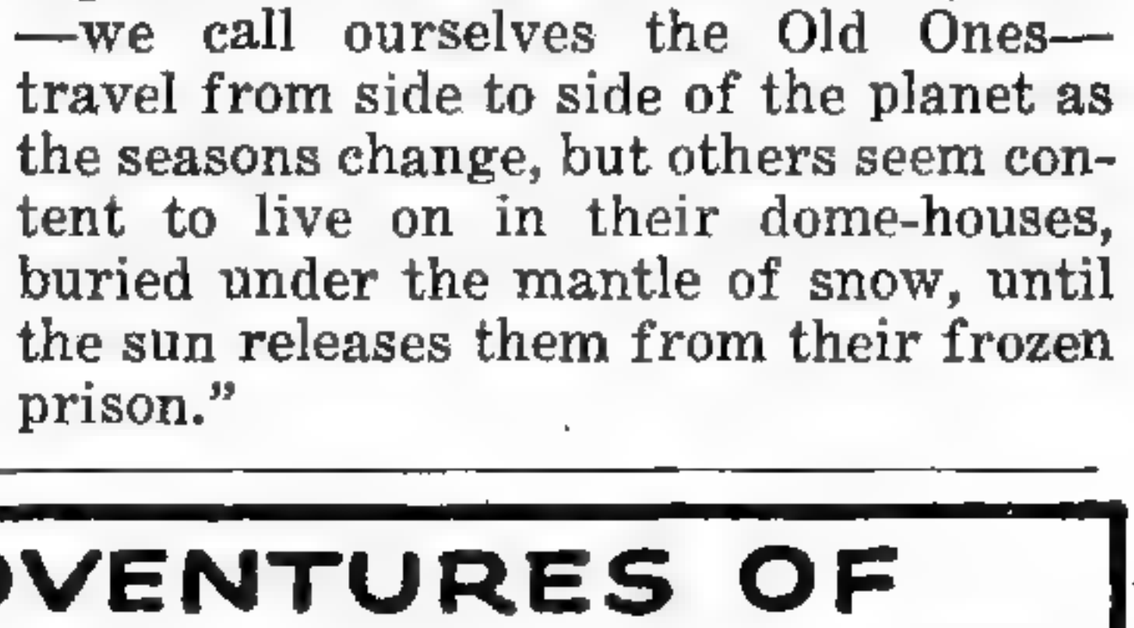
THE ADVENTURES OF

IT SMELLS GRAND



TAKE ONE WHIFF! (FOR THIS YOU'VE YEARNED!)

IT PACKS RIGHT



PACK YOUR PIPE— NOW YOU HAVE EARNED

"Do you realize how interesting all this is to me?" asked Whitland. "I was the only living astronomer on the Earth who believed that such a movement of Venus took place. Now, I am actually here, think of it! And the real facts are just what I said they were, and when I stated them I was twenty-six million miles away!

"I don't want you to die. I want to go over to the other side of Venus. I want to see what happens when the sun strikes those mountains of ice and snow. You are the only one who can take me there. You will, won't you? I am an old man, and you seem to be so young and wonderfully strong. It would be such a simple thing for you to do. Isn't there some kind of flying machine you can use? If we stay here, we shall both die of cold. I don't mind death—everyone must die sometime—but I do want to see the final proof that I am right before I die, and the only way that I can is to cross over to the east side of Venus. *Please take me!*"

IT WAS a strange sight, the little old man clinging in his eagerness to the robe of the fair godlike Venusian. The giant looked down at the pleading face of the astronomer, and said simply, "But I want to die."

"All right! But first take me across the planet. Then perhaps we shall both be ready to die. Perhaps I shall be so happy that I shall die of joy!"

"I guess that I shall have to let you have your way," at last decided the Master. "There is only one possible chance, and that is a slim one. Some distance from here lies one of our old cities. Long ago, when our wonderful race was in its prime, we lived there. I think that if we go fast enough we can reach it before the darkness comes. We shall have to go very fast. I think I will have my servants carry you to make faster time."

He whispered something in an odd tone and at once two of the plant servants picked up Whitland, slung him on their arms between them and started at a smart trot through the forest, the Venusian and the other servant following.

On and on they went, resting only when they were utterly wearied. Day after day passed. Meanwhile, it grew slowly darker, there came a chill in the air, and now and then falling snow. Evidently there was no time to lose. The planet was swinging westward faster than they could run eastward.

The footing was now becoming hard. The fern leaves were slippery and wet with snow. The wind blew cold, chilling the astronomer, who was not able to keep warm by exercise. He shivered

[*Turn page*]

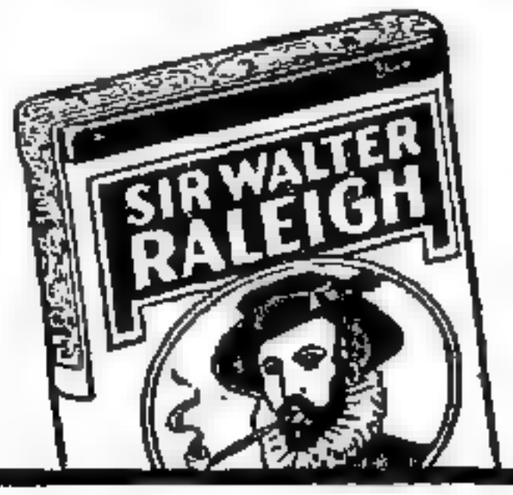
UNCLE WALTER

IT SMOKES SWEET

—HAPPINESS FOR ALL CONCERNED!
—with Sir Walter Raleigh!

IT CAN'T BITE!

SIR WALTER RALEIGH'S BLEND OF CHOICE KENTUCKY BURLEYS IS EXTRA-AGED TO GUARD AGAINST TONGUE BITE, AND SIR WALTER RALEIGH NEVER LEAVES A SOGGY HEEL IN YOUR PIPE. STAYS LIT TO THE LAST PUFF.



It costs no more to get the Best!

and wondered just how much longer it would be before they could reach a warm place.

Just in time they reached one of the main doors of the city. The weather was bad. The sky was dull gray and out of it came pelting pellets of frozen rain. The temperature had fallen to below the freezing point.

The Master pushed against the knobs on the door, first the upper one, and then the third from the bottom, and at last the one on the extreme right—in the ring. That knob, with the ring round it, looked a little like the great All-seeing Eye. The door swung open and the Master almost fell in, sliding on the marble floor. The servants, carrying the now unconscious astronomer, came next. Just in time the Venusian arose, slammed the door shut, and dropped from fatigue.

They were in the City of the Dead, but the winter was upon them. They would be fortunate to live through the next four months till the recurrent sun would liberate them from their snow-bound home. Meantime the blizzard raged over the ancient city, a place of domes, that rose on each other like gigantic soap bubbles. Only a few days before those domes had arisen in the sunlight, their glass walls glistening golden and crystalline in the glory of the perpetual beams from that central furnace of radiant light. Now the domes were encrusted with snow. Another day would bury the city completely under a thick blanket of dead white snow.

But in that city, under that snow, two men lay sleeping off their fatigue, and three plant servants, shrunken to their dormant condition, leaned against the wall, awaiting their Master's voice.

XV

THE OTHER dome-house, sheltering Sir Harry, Miss Carter and their hosts, was also covered with the deep blanket of snow and sleet that was swiftly making the exteme west of Venus a silent white grave. The darkness and the cold had come with a rapidity that was startling to the explorers from the Earth. To the Old Ones it was a part of their routine existence.

They explained it all to their visitors: that the dome-house would be covered a hundred feet deep by the storms, but that underneath, they would remain snug and warm, thanks to the perfect architecture devised by their ancestors many millions of years ago.

"That is all right for you Masters of the evening star," commented Sir Harry, "but how did the Monsters survive during all those centuries?"

"So far as we know, they just kept moving towards the sun. As their land became covered with snow, they kept going out into the heated desert. No matter how bitter the winter, there was always the edge of mud, the region where the sun continued its constant fight against the cold. Perhaps some of them would cross the continent, going around the poles, but most of them lived a miserable existence out on the hot mud flats till the sun started once again to melt. The change is extremely rapid. In a week the torrential waters are refilling the old river beds. In another week new branches start from the tops of the fern trees. In still another week part of the ground is bare. Then the Monsters have always come back, thin, worn, and not so numerous. They ate the tender sprouts of the ferns; we thought also that they ate each other, the old ones of their tribes. Then came the time for their spring festival and their matings. Something like that happened every year. Of course, it was hard on them, but they survived."

"But what will your friend do?" asked Sir Harry, "—the one who went into the forest knowing of the danger?"

"Don't you know? He went out there because he wanted to die."

Miss Carter looked up from her sewing, suddenly. "I wish we knew what has happened to Mr. Whitland, Harry. If he is alive, it seems as though he

would try to communicate with us. And where is the space car?"

"I am going to answer some of your questions," interrupted the Master. "We have a rather fine receiving apparatus. It picks up the sound waves and transforms them into vibrations that can be appreciated by the nerve-endings of our fingers. Of course, we only use this machine for short distance work. When we received sounds from the Earth, we used amplifiers. Suppose I try to communicate with some of our race and see what I can learn? If your friend, the one you call Percy Whitland, is with any of our race, we shall be able to have you talk to him."

He picked a little red box off a table and placed it on his knees. Then he placed his hands on either side of it, holding it lightly with the pulps of his fingers and thumb.

Sir Harry and the white-haired woman watched him with the greatest interest. At times he looked slightly worried, at other times he smiled. At last he took his fingers off the box.

"It is all very interesting," he commented. "There seems to be no doubt that a large number of the Monsters migrated in an unusual manner. Our western winter is in full blast and most of our race are shut in for the next four months. There are a few couples who live on the eastern habitable strip and of course they are just beginning to thaw out for their four months of summer.

"We can answer your question concerning your friend, the astronomer. The Master who left here to die in the storm found him and took him to one of our dead cities. They reached it just in time to escape from a frozen death. The Master says that they are both ill from exposure, but they feel that it is nothing serious. Would you like to talk to your friend?"

"My word! Yes!" exclaimed Sir Harry. "That would be a remarkable experience. How shall I go about it?"

"Simply hold the box with your finger tips and ask him a question. Then wait for the answer."

SIR HARRY picked up the little box. He was acccustomed to the televisional apparatus in use by the Conquerors, but this mode of conversation was a trifle more weird and inexplicable.

"Hello, Percy! Where are you?" he asked.

And then he waited. His face was anxious. At last he looked at the host and said in puzzled voice, "It seems that something in my brain answers, *'I am in a City of the Dead.'* Shall I go on talking?"

"Certainly."

"Why did you leave the space car, Percy?"

And again something seemed to answer, inside his brain: "I could not stay with them, Harry. They were too cruel."

"Are you sick, Percy?"

"A little. But we are comfortable here and I think I am going to have a wonderful time studying the culture of past ages."

"But you are an astronomer, Percy, and not an archeologist or anthropologist."

"I know. But for the first time in my life there is no sky! My friend tells me that above us are a hundred, two hundred feet of frozen snow. Here all is light and comfortable, but there is no sky. I have to keep my mind active, so I am going to study for four months in their museums. They have every part of their past culture saved. And gold plates, Harry, with the past history of millions of years! The man who saved my life has promised not to kill himself till the summer comes, when he can bring you and Miss Carter here to be with me."

"Extraordinary! But where are the Conquerors?"

"I don't know, but I know this: I am through with them. Is Miss Carter there?"

"Yes, indeed she's here."

"Give her my best regards. Tell her I have something in mind concerning her. It will have to wait till this winter is over."

"Good-by, Percy, old top."

"Good-by, Harry, dear lad."

THE Conquerors had become great through establishing the principle that the nation was greater than the individual. For eighty thousand years there had been no such word as "failure" in their national vocabulary.

In their first contact with the Monsers they had lost heavily from the ranks of their most important Specialists, because they had not properly protected themselves against the element of surprise. They had been on the offensive for so long that they had by now forgotten the technique of a proper defensive. The surprise over, they had coldly plotted the annihilation of a race that was more animal than human, and had relentlessly carried out their plan.

We know that the Conquerors returned to their space car exceedingly fatigued after their victory over the Monsters, but well satisfied with the results of their campaign. They had lost many of their number, but the Monsters had been exterminated. They could rest now, secure in the thought that they had followed an eighty thousand year tradition and destroyed an inferior race.

The space car lounged safely in the soft mud. With all the doors shut, there was nothing now to fear. The Conquerors slept on . . .

When at last they awoke, they saw through the windows a sky that was unusually gray and overcast. An open door showed that it was snowing hard and was turning very cold. The scientists realized at once what had happened. During the hours of sleep the Evening Star had turned a little westward. Oscillation had begun. The land that the space car rested on was slowly going into the shadow that would end in the total darkness of the long night.

But even then they did not fully realize just what that meant. They felt that all they had to do was to start a few of the rocket tubes, very gently shoot the car a few hundred feet into the air, turn it directly around so the nose would point east instead of west, and then sail over the heated desert to the eastern strip of sunshine and warmth. There they were sure that living conditions favorable to life would be found.

The Directing Intelligence gave the order and power was gently applied through the lower rear rocket tubes. Every dwarf was at his place, every condition was satisfactory. The nation of Conquerors were ready for another step in their interplanetary adventure.

Nothing happened.

The long cigar-shaped space car, its silvery sides glistening grayly in the gathering gloom, remained immovable.

In the pilot cabin the Directing Intelligence, one of the Co-ordinators, and the Specialists sat waiting for the flight to begin.

Still nothing happened.

Far to the rear of the pilot cabin the throbbing of the power in the tubes could be heard. The space car began to tremble under the stress of power that was unequal to moving the burden in front of it.

When the Directing Intelligence felt that tremor of the ship under him he cried to the chief mechanician of the ship, "Turn the power off!"

Then he slowly moved his head till he looked directly into the eyes of the Aviation Specialist, seated near him, and asked, "What is the matter?"

"I do not know."

"Then find out. If Percy Whitland were here, he would have an idea."

For the next hour every part of the machinery of the space car was carefully investigated. It appeared to be perfect in every detail. It was still the brilliantly constructed machinery that had so safely made the interplanetary journey from Earth to Venus. Directing Intelligence received the various reports in silence. At last he ordered the power

started again.

Nothing happened.

Meanwhile it was growing darker, the wind was increasing in violence, the storm was throwing thousands of tons of hail and snow upon the strip that was so rapidly moving into a hell of dark desolation.

AGAIN the Directing Intelligence looked at his Specialists. It was now so dark that lights had to be turned on in the pilot cabin. There was nothing in the ruler's face to indicate fear. But in his eyes, way back in his large unblinking eyes, there was an expression of doubt.

Then he said, after some moments of thought, "This is what has happened. I should have known it would happen, If I had stayed here in the space car and not joined in the slaughter it might have been prevented. Had Percy Whitland been with us, he would have warned us against it."

One of the Co-ordinators now did an unprecedented thing. He spoke without being asked! "What happened?" he questioned. "And how could it have been prevented?"

"This is a very large car," answered the Directing Intelligence, "and it is very heavy. When we made our final stop, we did not have a marble platform for it to rest on; instead, we made a landing on the ground. That ground was mud, rather stiff and capable of bearing our weight, but still soft enough to give somewhat under the weight of the space car. No doubt the car sank down into the mud a little. How far, I do not know. When we returned to the car after the slaughter, we were so tired that all we could think of was going to our cabins and securing some sleep. That is what happened."

"But what was it that happened?" insisted the Co-ordinator.

"We slept! Too long. And while we slept oscillation started. And the part of Venus we rested on, in the mud, slowly passed out of the sunlight into the night. That is all that happened."

"But why can't we start?" again queried the dwarf.

"Because the temperature fell! When we came back to the car, it was exactly fifty-five degrees. Now we are in the middle of a blizzard. It is probably zero outside."

He paused. *"The space car is frozen in the mud!"*

"If that is all," declared the Co-ordinator, "we can tear ourselves out."

"We can if we have sufficient power," acknowledged the Directing Intelligence.

"Well, if that is all, we need not worry," commented the Co-ordinator. "Power? Why, we control the greatest power that the intelligence of man has ever been able to conceive of. We had power to shoot us through Earth's atmosphere and from Earth to Venus in a little more than half a month. Power? Certainly we have power. After the demonstration of power that this space car has given it is ludicrous to think that we would be stopped by a little mud frozen to the bottom of our car. *All we have to do is to use that power.*"

His confidence swept in a contagious wave over all the pilot cabin. What he said was in harmony with the spirit of their national life. They had never failed to use their power. They had never been willing to acknowledge that anything or anybody, power of the gods, feeble effort of men, or super-human forces of subterranean demons, could stop them.

Accordingly, without further thought, without the delay of a minute, the Directing Intelligence gave the order:

"Turn the maximum power into the four rear tubes."

THE mechanician pressed several buttons in rapid succession. The space car shook like a wounded pre-historic worm, and then, with a mighty roar that sounded through the darkness, tore itself out of its ice bed and hurled itself straight into the pitch-black of the

Venusian night. It raged onward through the storm like a comet riding on the wings of Death.

And back of the car, alongside of it, all around it was the arctic blizzard, the hurricane, storming at a hundred miles an hour, but hopelessly left behind in the race with the snow-encrusted monster from the skies, the beautifully formed greyhound that had come so triumphantly from the Earth.

There was a gleam of triumph in the eyes of the dwarfs in the pilot house. Once again they had won a victory, this time over the elements! Again intelligence applied through machinery had triumphed over the brute strength of even Nature herself.

"It was easy!" cried the mechanician.

"And we did it without help," chimed in the Co-ordinator. "If Percy Whitland had been here, he would have been given all the credit."

But the Directing Intelligence was peering ahead into the darkness as though he had failed to hear them. He suddenly spoke and in such a voice as to make them all turn toward him. His words were: "Stop speed and prepare to turn!"

It was his last order. One moment the car was dashing on through the darkness at the speed of a thousand miles an hour. The next moment there loomed just ahead a dense black mass. The Directing Intelligence saw it, but too late. Head on, the most beautiful product of man's intelligence struck the boundless ice mountain!

There was an ear-splitting shock as though worlds had crashed together. The car crumpled as if it were made of cardboard. Seams were ripped apart, machinery torn, furniture hurled far over the sides of the crippled Conqueror of Space. One second it had been defying time, space, and the gods; the next, it crashed to the ground, where it lay broken into a thousand splinters.

And the mountain of ice that had remained sleeping for millions of years, that had passed an eternity of waiting for something new to happen—that mountain of ice, unchanging and unchangeable, was struck by the space car and *never knew it.* If it had possessed the power of thought, it would, at the most, have concluded that a larger crystal of snow than usual had landed against its lofty sides.

Down into the crevasse the storm drove the snow and sleet, inch by inch, foot by foot, until the car was buried deep to remain there in the everlasting night. And before many hours had passed a clean white layer of even snow covered the place where lay the space ship of the Conquerors. Not a trace marked its grave. One more nation had come to its end, a race of Supermen had reached its final doom.

XIV

MONTHS passed. For the Old Ones buried under the snow in their warm dome-houses it was just another winter of quiet meditation. But to the interested visitors it was an opportunity to learn. Though both Miss Carter and Sir Harry had left the landing platform ill-prepared to write a history of their peculiar adventure, their hosts were not at a loss to supply them with writing material.

So the long hours passed, Miss Carter on one side of a table and Sir Harry on the other, both writing as hard as they could on a peculiar sheet of white metal with a pencil that made a very distinct black scratch. Long conversations would be held with the Master and his woman, covering every phase of Venusian life, and then the two anthropologists would start writing again, page after page of their monumental work on the history of the social development of the Venusians.

Percy Whitland was having an even more wonderful time with his rescuer in the City of the Dead. His mind had been trained for years in the making of accurate observations concerning things that were millions of miles away. Now

shut off from his beloved heavens, he turned that keen power of observation on the little things that were right at his elbow. At times his keen interest and constant questions almost drove the Master frantic. It seemed that in his search for knowledge the little man was insatiable.

It was in the records concerning the development of radian energy and the study of rays that Whitland found the greatest pleasure. Former generations of Venusians had made elaborate studies of astronomical matters and committed their knowledge to the gold plates which formed the library of the City of the Dead. The words were different, but the conclusions closely harmonized with the studies that Whitland had made.

Percy Whitland, when he found these astronomical records, felt that he was among friends. Here had lived and died men who, under more favorable circumstances, would have made the finest kind of companions for him. He marveled at the accuracy and minute details of their work, and voiced that marvel one day.

"I do not see how they had time to do it all. I have worked at a killing speed for thirty years, and I have been able to do only a fraction of what there is to be done."

His host laughed. "You forget that those ancestors of mine were long lived. In those days it was no uncommon thing for a man to live to be ten thousand years old, and now, with our system of hygiene and dietary precautions, there is no death from disease. Those old people had all the time they needed for their study."

"That must have been wonderful. I have enjoyed these months with you as my teacher, but do you know, I am just realizing how selfish I have been. For days I have not so much as thought of my friend, Sir Harry, and have even forgotten the lady. When shall we be able to see them?"

"In another month the swing of the planet will begin again. After a few days of sunshine we shall be liberated. Of course, everything will be wet for a while, the river beds roaring torrents and all the ground soggy with water. The frost will come out of the ground and make the walking very bad. Two weeks after the sun starts to shine the fern trees will put out new leaves, and that is usually a sign that we can start to visit each other. I will take you there as soon as I can, and then I shall have to leave you."

AT THIS the astronomer came over to the chair of the godlike man. With almost childlike timidity he took hold of his hand.

"Marco," he said, "you have been very kind to me all through these long months. I have learned to love you. Now, with the summer at hand, I shall be very happy to be with Harry again, but it will make me more happy if you stay with me. I know that you still grieve over the loss of your lady and that it will never be possible for you to forget her, but I do wish that you would promise me to keep on living. Please promise me that you will stay with me, and continue to tell me about the wonders of this old planet."

The Master looked down at the little man. Then he took his free hand and laid it on the astronomer's head. His face became serious.

"That is a hard request to make of me, Percy Whitland. I would not consider it from any other living being—but you have been so considerate of me and my feelings, you have shown such interest in the history of my race and such intelligent appreciation of the grandeur that was once ours, that I have to consider your feelings, and—well, I will promise you that I will not end my life till you give me permission, or, perhaps, until after you have left the planet."

The astronomer looked ahead of him. For some minutes he could not trust himself to speak. Then, with a catch in his voice and tears in his eyes, he

replied, "Thank you. That is awfully fine of you. Now suppose we arrange to leave here and join the others as soon as we can?"

They had to wait another week, and most of another. Then the Venusian announced that their liberation was at hand.

"The sun is shining on the city," he announced, "but we cannot see it, because between the roof and the sunbeams lie a hundred, perhaps two hundred feet of snow and ice. Yet, right at this moment the snow is melting as fast as though it were in an oven. The hour will come when we shall hear the crackling of the melting ice and then in a little while the sunbeams will again stream through the glass spaces of our domes. Soon after that we will start to join our friends. In the meantime, I think you had better start talking to them now and then. You have been so interested in your new investigation that you have not thought of doing that."

"They don't want to talk to me," laughed Whitland. "They have each other and their new studies and I am sure that they gave me very little thought once they knew that I was safe for the winter."

"That may be true, but I would talk to them anyway. They were an interesting couple. Frankly speaking, I could not understand just what the relation between them really was. Were they mated?"

"No. Not in your sense of the word. They were in love with each other and thought the world and all of each other, but they were not mated."

And then he started to explain to Marco the theory of marriage as practiced on the Earth. He knew a lot more about the stars than he did about human relationships, but even the few facts that he told were sufficient to make the Venusian feel that somehow or other the average man and woman on the Earth were not so happy as they might be.

Finally the time came for them to leave. Rather regretfully the astronomer saw the door closed behind them leaving all those lovely treasures shut up till sometime in the far future chance and fate would again uncover them.

At the end of their journey they found their friends waiting for them.

THE International Astromical Society was holding its triennial meeting at Flagstaff, Arizona. The meeting was held there out of respect for the lost and presumably dead member, Percy Whitland. It was not a very large association, but the membership was exclusive and particularly intellectual. At the last assemblage Percy Whitland had been elected president. Between meetings he had mysteriously disappeared from his observatory and had never been heard from since. The remaining twenty-four members felt that no more fitting memorial could be paid to him than to hold the regular meeting near the observation made sacred by the long residence of one of the most remarkable astronomers the world had ever produced.

On the second day of the meeting John Youngland, who for over fifteen years had been closely associated with the late astronomer of Arizona, but who, in spite of those long years of student life, was not considered erudite enough for full membership in the International Association, asked the new president for the privilege of the floor.

"Gentlemen," he began, "as you well know, the chief work of my master and teacher, Percy Whitland, was to prove definitely and beyond a doubt that life existed on other planets besides the Earth. There is no need for me to go into those ideas which originated in his wonderful mind, for all of you have heard him talk, seen his photographic plates, especially of Venus and Mars, and I know that most of you differed from him.

"He not only was sure that life existed on these planets, but he was confident that some day we should be able

to communicate with the inhabitants of these planets. He even dreamed of the time when he might be able to go to one of these planets and see for himself how close his fancies were to the real facts. He went so far as to give me a code which he would use in sending radio messages to me from one of those far off worlds.

"After his disappearance from the observatory, I and a few of our students constantly worked with our radio. We kept on experimenting with every possible wavelength. Some time later we picked up two messages which came in a great assortment of languages. A paper on those two messages was read by Funcan Forsythe before the International Association of Radiographers. He reached the conclusion that they were the work of an unidentified expert who was deliberately trying to fool the entire world. Perhaps you will recall what those messages were. I will refresh your memory. They were:

Follow Number 85.
Protect Against 87.

"I am forced to admit that these messages meant as little to us in this observatory as they did to anyone else. But, in spite of our inability to understand their meaning, we kept on trying to receive other messages. *Last night they came,* and to my astonishment, they were in the code which Percy Whitland had so often told me he would use! We caught the message first when it was nearly over, and almost died of grief when we realized how much of it we had lost. But as soon as it ended it began again and we heard the same words in code four times more. As the code is difficult, I translated it into English and placed it on a phonographic plate.

"I am going to ask you to close your eyes and try to fancy that it is the voice of Percy Whitland, late president of your association, speaking to you. Please listen:

"Fellow members of the International Astronomical Society, this message is from Percy Whitland. I am on the planet Venus, having come here with the nation known as the Conquerors in company with Sir Harry Brunton and Miss Charlotte Carter. We came here on a space car. I want to tell you that Venus is inhabited by a race very similar to ours. Geographically the planet is very much as I described it in my paper on Venus before the Society in 1923. I have witnessed the phenomenon known as oscillation. Brunton wishes to inform his Government that he believes the danger from the Conquerors is over for the present. Impossible to return to Earth now, but will communicate occasionally. Trip started from Reelfoot Crater. This message being sent from the Venusian Observatory on peak of mountain South Pole Venus. If received, send answering signal. Will closely watch the Earth through three hundred inch telescope for one week. Would advise that Mallory Wright and John Ormond of Eight Sixty-three West Ninety-fourth Street, New York City, guide a group of scientists to Reelfoot Crater to make a thorough study of the underground world of the Conquerors and prevent any possibility of those remaining on the Earth ever becoming a menace to our race in the future. Brunton suggests that all the colonies be located and studied. We may be able to return, but this is doubtful. Remember that the human race can never be safe till all the dwarfs are destroyed.

(Signed) Whitland."

It is only fair to say that the associates of the International Astronomical Association remained silent till the end of the message. Then they raised a riot that was remarkable, considering the fact that it was made by twenty-five men, most of whom were old, withered and anaemic, specimens of manhood, despite their intellectual capacity. They crowded around John Youngland, they shouted at him, shook their fists at him and just stopped short of man-handling him. They shouted "Liar," "Fool," and

"Scoundrel!" It was some time before they quieted down sufficiently for the President to express the sentiment of the Association. Quivering with rage, he turned on the young man who had had the temerity to present such a complete hoax to a distinguished gathering of scientists.

"If you think, you young fool," he shouted, "that you can make us believe any nonsense like that, you certainly are a moron. We liked your teacher, the late Percy Whitland, although we always thought that he was a little mad. We do not know where he is, but we hope that he is dead rather than in a home for the mentally afflicted, where you ought to be."

HE WENT on with, "Your whole message is a cunningly concocted fabric of foolish lies. You are a disgrace to your teacher and to the scientific world. I am going to ask the secretary to expunge your name and your speech from our records and not to put one word of it in our year-book. I am going to ask everyone here to keep silent about the entire affair, for if it found its way into the public press, we should be the laughing stock of the world. Shame on you! Shame for trying your April fool jokes on us! Now, gentlemen, the meeting will come to order and we will listen to the next paper on the programme, entitled, *An Electromagnetic Study of the Cavity Radiation of Certain Stars in the Nebula of Andromeda,* by the Honorable Whitley Stonecrop, of Edinburgh University."

John Youngland left the building and returned to the observatory. There he was joined by a group of young men who had been students of Whitland. Their reaction was quiet, in spite of their anger.

"That is just the way things go in life, boys," commented Youngland. "A man spends his life doing a fine piece of work and finally succeeds in it. Then no one is willing to give him credit. There is just one thing to do, and that is to wait for more messages. The time will come when we shall be able to write a book about all this, and when we do, those old fossils will be sorry they called the whole message a hoax. We will some day show them that we were right and that Whitland really sent it from Venus!"

"But how about the signal?" asked one of the workers. "He told us to send a signal if we received and understood the message. What are we to do about that?"

"We can't do anything now. He wants some kind of a flare sent up, but we are not able to do that by ourselves. A fire sufficiently large to be seen on Venus would have to be arranged for by a nation. All we can do is to wait for other messages and, in the meantime, trust our master."

Youngland waited that night till the observatory was quiet. The perplexed, grief-stricken man, the favorite pupil of Whitland, slowly climbed the little ladder leading to the roof of the observatory. Step after step he went till at last he climbed out onto the little platform at the very top. Beyond him were the depths of space, deep calling to deep, and star to star. Far away the Evening Star shone in its delicate beauty. The man stretched out his arm towards Venus and cried:

"We heard you, master. *We heard you!* And we believe in you. We want you to know that we have your message!"

He repeated it several times. It seemed to satisfy him.

Of course, the occurrence of the next half hour was a coincidence. It was one of those peculiar coincidences that lead to so much misunderstanding. A supposedly dead volcano in the Bad Lands of Dakota selected that very time to break forth into a terrific activity that shocked the entire western world and covered several states with ashes. The flames from a three-mile crater flung tongues of red heat thousands of feet

into the air.

Youngland read a full account of the bursting of the Dakota volcano. He instantly appreciated the fact that a flame of this size might be seen from Venus through a three-hundred inch telescope. He also realized that his master would believe that it was an answering flare, sent up for no other reason than to inform him that the message from Venus had been received.

"I am glad for his sake," Youngland mused to himself, "that it happened just when it did. Had hell broken through the crust of the Bad Lands a week earlier, the master would have paid no attention to it, perhaps would not even have seen it. Well, no doubt he is happy. The thing for me to do is to hunt up these two New York men and give them the message. I wonder who they are and what it all means. No doubt they will understand. And who is Brunton?"

A week later, Youngland in New York located the two men and their wives. They understood only too well the advice contained in the message from Venus. Taking Youngland with them they made a hurried trip to Washington, where they had a long secret conversation with the President. It was thought best to ask the British Empire for co-operation, since Sir Harry had come to America as the direct representative of that nation.

After a delay of some months, made necessary by the complicated details of outfitting an exploratory group of scientists, the expedition started to Reelfoot Crater. Meantime the combined armies, navies and air forces of the two great nations of the Earth held themselves in readiness to render aid in this final effort to free the human race from one of the greatest perils that had ever confronted it.

XVII

THE Old Ones of Venus had gathered for a national conference on the topmost peak of the Southern Mountains. Here their wonderful observatory was located and from here they had sent the messages to the Earth and also received through the centuries the confused babble of noises and voices.

They had yielded to the entreaties of Percy Whitland to try for a two-way communication with Earth. Their experience with the Conquerors made them feel that it would not be wise to directly invite any more Earthly visitors, but they sympathized with the astronomer and agreed that it would be interesting to determine whether communication could be established. Some future generation, either on Earth or on Venus, might need the knowledge that such aerial transmission was possible.

Percy Whitland had been happy in the City of the Dead. But now on the Southern Mountain, high above the steam that rose from the heated desert, seated so he could look through the three hundred inch telescope at Earth, he was more than happy. He was intoxicated with joy! The Masters followed him around, happy in his happiness, for all of them had learned to love the little deformed man with the scholarly mind. Sir Harry and Miss Carter, completely overshadowed by the greatness of their friend, kept still, pleased beyond measure to find that after all these years of doubt and disappointment he was at last supremely satisfied with the results of his labor.

After making a thorough examination of the giant telescope and familiarizing himself with its mechanism, Whitland was conducted to the transmitting room and placed before the recording and sending plate. The Masters and their women, Sir Harry and Miss Carter, stood around while Whitland was lifted to a chair so his mouth would be on a level with the center of the microphone. Then he started to deliver the message in a code language, clearly, even though his voice trembled. He repeated it four times. Then

he turned around to his friends.

"This message is timed in a most peculiar manner. I did not realize the fact till last night. For years I have kept a careful diary, and since I started on this trip I have tried to keep oriented so far as Earth time is concerned. Last night I did some calculating and realized that this message was sent to the Earth at the very time the International Astronomical Association is meeting. They were to meet in Arizona at my observatory. Of course, I cannot tell what change my absence made in their plans, but I am sure of one thing. When I was working in Arizona, I told my first assistant, John Youngland, that if I ever had a chance, I would talk to him in this code. I trust him. Up to the time of his death he will be on the lookout for the message from me. If he is alive today and caught the message, he will signal to us. Some way he will let us know that he had heard us."

Then he asked the Venusian Master who had charge of the telescope to go with him to the observatory and assist him in watching the far away planet, Earth for a possible signal. The rest of the nation left them alone and started to discuss matters of general importance. They felt that a search should be made for the space car; that a more vigorous and concerted effort should be made to find and exterminate the Monsters and make the planet safe for their own nation. And finally, they decided to adopt the three visitors from the Earth and make them real members of the Venusian commonwealth.

DURING those hours no one paid any attention to the receiving apparatus in the radio room. Had some one been there, they might have heard the pathetic message cried by John Youngland from the top of the observatory in Arizona. But the sound sped through space, unrecognized and unnoticed.

But it was not necessary. Whitland was at the telescope. The Earth, ordinarily visible from Venus simply as a brilliant star, was greatly magnified by the enormous telescope. It was possible to make out dimly her continents and oceans. Suddenly a little pin-point of flaming red shot up from the Earth, shot up into the outer reaches of the atmosphere and hung there like a jet of burning gas. Percy Whitland saw it, gasped and yelled to his co-watcher:

"The signal! The signal!"

And thus the coincidence of the sudden activating of a supposedly dead volcano made one man happy for the rest of his life.

He was still beaming the next morning when he talked the whole matter over with Sir Harry and Miss Carter.

"You have no idea what all this means to me," he explained, enthusiastically. "I worked a lifetime on this sort of thing, and my fellow astronomers all laughed at me. Now I have shown them that I was right. At last I am on Venus and I sent them a message; and they have shown me that they received and understood it. I have accomplished everything that I want to accomplish."

"My word! That must be a fine feeling," exclaimed the Englishman, glumly. "Now I cannot feel that way. You see, Miss Carter—well, what's the use of talking about it?"

Percy Whitland took his friend's hand.

"You know, Harry. I have been a selfish brute. I have been so interested in this adventure that I forgot all about you and your happiness. I would determine to tell you and then something would happen and I would forget all about it for days at a time. But I am going to tell you now. When I was a young man, just after we parted at Oxford, I became a minister. Yes, a regular ordained minister. That was before I became interested in astronomy. But, once ordained, always ordained—so, if you and Miss Carter really want to be formally married I can marry you, and I am sorry I didn't think to tell you sooner. Will you forgive me?"

The Englishman picked him up and held him at arm's length in the air.

"Forgive you? My word! How can I ever repay you? Charlotte! What do you think? Percy is a regular minister! He is going to marry us!"

The little white-haired woman almost ran up to the two men.

"That's wonderful, Harry," she whispered, "but we can't marry just now. You know I haven't a trousseau."

"My word! What has that to do with our marrying? I will speak to the other ladies about it. We are going to be married in about six hours and—why, you make me feel like wilted lettuce! You run on and find what the ladies here wear when they marry, and I will speak to the men and arrange for a real wedding supper."

That evening Sir Harry and his bride were looking into space. It had been a wonderful wedding, and though the ceremony was a new one to the Venusian ladies, still they had dressed the bride in an ensemble that brought out all her delicate beauty. The banquet had been a complete success.

Percy Whitland had secretly explained some details of an Earthly wedding to the Venusians and they had tried to make the ceremony truly an Earthly one. Presents had been given, old shoes thrown and the bride had been thoroughly kissed by all the men.

While a wedding journey was, for the time, impossible, nevertheless arrangements had been made for the new couple to occupy one of the dome-houses as a gift from the entire nation.

So that evening Sir Harry and his bride were out on the mountain, gazing into space.

Cuddled in his arms, the little white-haired bride whispered, "Aren't the stars beautiful, Harry? See! That star there. What is it?"

"I believe it's Earth, my dear—our old home."

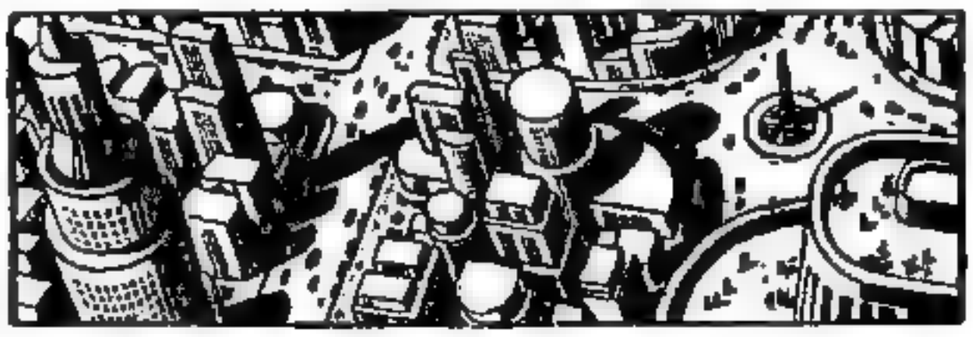
Sir Harry's bride sighed.

"Our old home! Shall we ever go back?"

Sir Harry held her at arm's length. He spoke soberly. "Do you want to go back, Charlotte?"

Charlotte gazed wistfully into the night. "Perhaps," she said, with an enigmatic smile.

And with this typically feminine reply, she crept closer into her husband's arms.



TWIN MASTERPIECES OF SCIENCE FICTION

DAWN OF FLAME

and

THE BLACK FLAME

By STANLEY G. WEINBAUM

CO-FEATURED IN OUR NEXT ISSUE—PLUS MANY OTHER STORIES!

TIME LIMIT

H. B. FYFE

For measurement-minded beings, the Telshans seemed inaccurate!

NOT A SOUL in the control room of the *Comet* had an instant's warning before the three strange ships surrounded them, herding the Solarian ship toward the nearest planet.

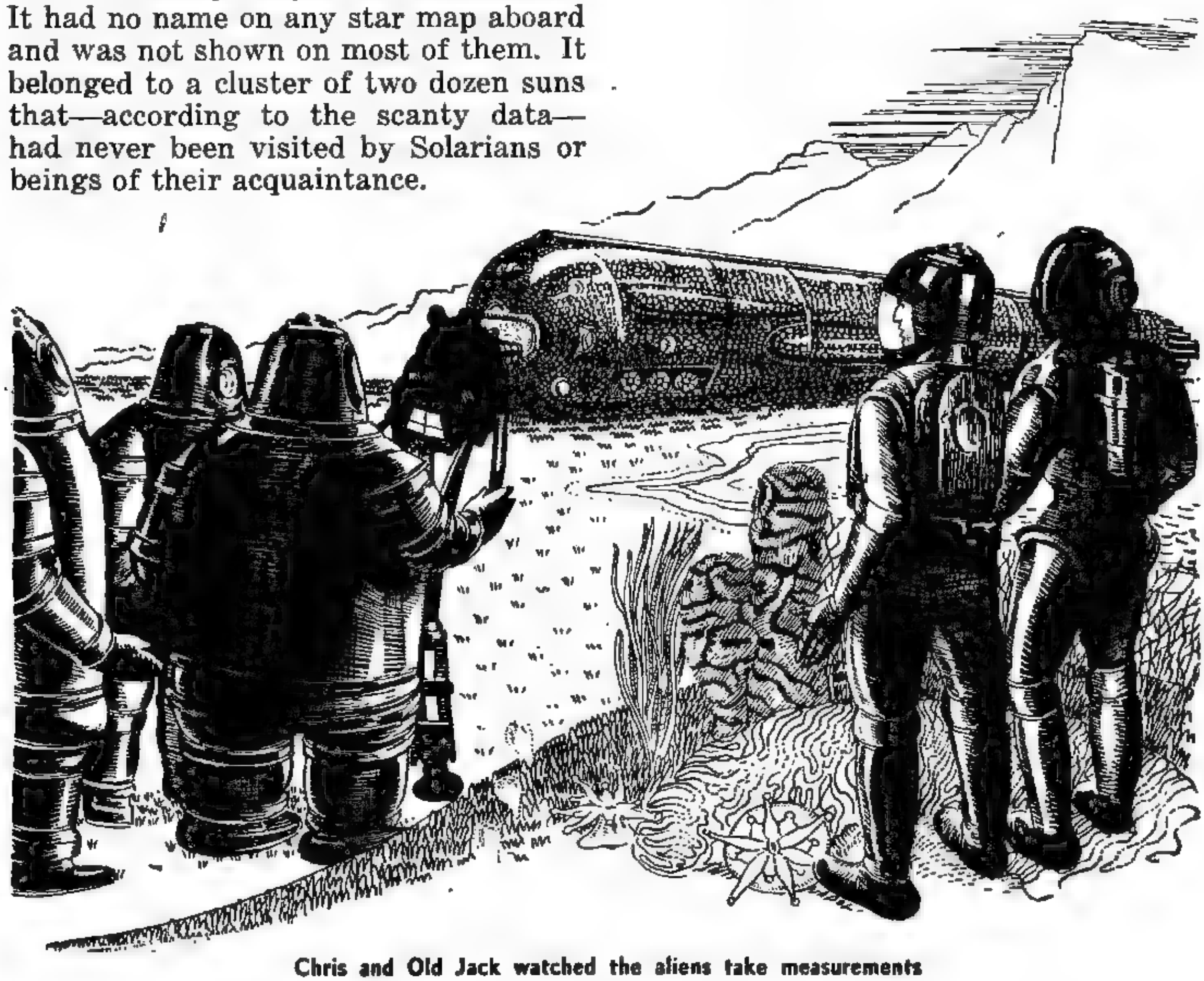
"None of the alarms went off," Chris told Old Jack later. "I don't know if they could damp our detectors or whether they piled in so fast they couldn't be picked up."

Captain Ryle had chosen the binary star as a likely subject for exploration. It had no name on any star map aboard and was not shown on most of them. It belonged to a cluster of two dozen suns that—according to the scanty data—had never been visited by Solarians or beings of their acquaintance.

And that condition, Ryle liked to remind his crew of eleven, was the kind of thing they were assigned to remedy.

Just before the other vessels appeared Chris had been aft, watching Old Jack working at the sort of thing *he* was employed to remedy—in this case a tool rack that had come loose from the rocket room bulkhead.

"Been fixed before, ain't it?" said Lucelli, the jetman on duty. "Ya can see the marks under the paint."



Chris and Old Jack watched the aliens take measurements

"Bet he fixed it that time too," said Chris, leaning his blond bulk against the bulkhead and trying to find a place to put his hands.

"Aw, whadda you know?" scoffed Lucelli amiably. "What's a first-run cadet wanna hang out in the rocket room for anyway?"

"Like to see what's going on," said Chris.

He watched Old Jack hold the rack against the bulkhead to judge position. The veteran's hair almost matched the gray paint. He moved deliberately, without a single wasted motion. Chris admired the deftness of his hands.

"I'm supposed to learn about the ship, it says here," he added.

"You come to the right place then," Lucelli snorted. "Old Jack can find every spot-weld aboard—from the outside!"

"Ought to," murmured Old Jack, "after fourteen years." His voice was clear, but low as if he seldom used it.

"How could you stand one ship that long?" asked Chris.

"Kinda got like home. After three trips, the first five years, I was the only one left of the original crew." He reached for a steel tape lying beside some paint cans. Chris handed it to him and found a smear of paint on his hand.

"Nobody else knew the old bottle as well, so where else could I get the same pay an' comfort?"

A BELL chimed several times.

"My number," said Chris. "I'd better get forward."

He ducked his head through the doorway and went out. In the control room, he found Ryle and Sanders, the second pilot.

"We rang twice, Christianson," said the dapper commander, staring suspiciously at the cadet's paint-smeared knuckles.

"Sorry, sir." With someone else Chris might have explained but Ryle rubbed him the wrong way.

"We lack data on this double star," said Ryle, nodding at the telescreen. "Be ready to take down anything I give you."

Chris got paper, pencil and clipboard from a locker and stationed himself behind Ryle. Sanders took a few photos.

They estimated the magnitude and type of each element of the binary. Six planets were visible about the near star. Just as they were choosing one of these for a closer look they received the first indication that they were not alone.

"That first ship popped into the screen from nowhere," Chris repeated to Old Jack later.

They were standing in a sub-control station several watches aft, peering at the planet on the auxiliary screen. The surface was mostly land with olive-colored areas and chains of large lakes. There were extensive ice-caps and, in spots, what looked like dust storms.

"Sanders had his hands full for awhile," continued Chris. "The Old Man was dancing up and down like water on a hot griddle. Finally they got the idea we were being herded. Things got better when we headed straight for here."

"Glad they caught on," said Old Jack. "Some of us got bounced around a little."

"I bet! Well, they finally called in Murphy and sent me to look for damage. Far's Ryle knows I'm still looking."

"Whaddya think *they* want?" asked the other, turning a curious gray stare on the screen.

"Dunno, but they went about it in a queer way. Like . . ."

"Like what?"

"Oh—did you ever get stopped for speeding a ground-car?"

Before the watch was over Captain Ryle was forced to order a landing near the equator of the planet. The *Comet* was now much nearer to the star about which the world revolved but all thoughts of observation had been discarded.

The first pilot, Murphy, brought the

ship down neatly on a plain near the shore of a large lake. One of the strangers landed between the *Comet* and a chain of low rocky hills. The others descended somewhere short of the horizon.

Chris, recalled to the control room, helped check the exterior atmosphere. It was non-poisonous but far too thin. Gravity was roughly four-fifths of Earth's.

Presently some of the strangers were seen. A dozen or so hauled a signaling apparatus over to the *Comet* and began to try out various light codes. With due allowance for space-suits, they looked more or less humanoid. Ryle ordered Chris to take someone with him and attempt verbal communication.

Chris donned his suit, specially made to fit his raw-boned hulk, and went out with Old Jack. The aliens gathered around.

"Let me try them," suggested Old Jack over his radio. "I've picked up snatches of lots of languages in space-ports."

Having asked him along with that in mind, Chris acceded.

There followed half an hour during which they fumblingly estimated radio contact and then listened to the leader and Old Jack gabble at each other with various words, hisses and clicks. In the end the pair struck upon a squishy dialect understandable to both.

"It's the lingo of the Kayal Stellar Group," the old spaceman reported. "I was there once. About six stars in the group. *He* says they aren't so awfully far from here."

"What's his own star?"

"Telsh, as near as I can get it. He don't speak Kayal any better'n me."

Old Jack and the Telshan exchanged further sibilant talk. The strangers packed up their signaling apparatus. Chris twitched with impatience, knowing that Ryle was doing the same and would shortly demand reasons for the delay. Old Jack finally took a moment to translate.

"Y'know, you weren't so far off about bein' arrested!"

"What do they think we did?" demanded the cadet.

"Oh, it ain't that we *did* anything. More like a customs check. They patrol the limits of this here star-group."

"The whole group?"

"This gent says they have twenty-odd suns under their control. They keep a close eye on outsiders."

"Oh!" Chris considered. "What do they want us to do?"

OLD JACK conferred again with the stranger. Chris took the opportunity to study the latter more carefully. He was shorter than the Earthmen but also had one head and the same number of arms and legs. His proportions were somewhat squat with a breadth of shoulder and hip that would have been freakish on Earth.

The Telshan's helmet had a lens-assembly for a viewplate, preventing Chris from getting a direct look at him. Nevertheless he got an indefinable impression that the other was not a mammal. As he was analyzing this hazy idea Old Jack reported.

"They want a solid identification," he said. "Home star an' all that. Then they take measurements of the ship."

"Almost like getting a license on Earth," mused Chris.

"Yeah. I asked should we get figures from Ryle but they said they have gadgets to scale them off with."

"*That* I'd like to see," said Chris. "Well, let's get back and tell the Old Man."

"He won't like it," predicted the spaceman.

Captain Ryle, when informed of the situation, did not even pretend to like it. He sent Chris out to protest.

The cadet was forced to return the second time to report that Telshan headquarters were located on one of the distant ships. The local detachment had landed beside the *Comet* to collect data. The interpreter was sure about that.

"The old trick—passing you up the ladder!" growled Ryle. "Well, I intend at least to show them our displeasure!"

Chris, the most likely instrument of such a revelation, tried to look inconspicuous. He pushed his big hands into his pockets, then withdrew them in clumsy haste as Ryle turned upon him.

"Take the old man, since he talks their jabber, and Number Two scout rocket. Fly over to their other ships and demand an explanation!"

"From what I've heard," ventured Chris, "it's standard—"

"I've heard that story before too. It *may* be so. Get over there anyway and see how they act about it."

Chris left the control room and located Old Jack. He told him he would be acting as jetman if the scout's rockets needed any attention. He himself checked the small craft's navigation instruments and tables as well as the controls.

"Not that I'll need them," he said with a sigh, "but Ryle is just the boy to ask if I did. *I* have to check what *he'd* ignore."

He ran the scout down a ramp from its cradle to the ground. Then he waited while Old Jack approached the Telshans clustered about their new mechanisms, to inform them of the flight.

Chris had a glimpse of shiny metal frames supporting a lot of lenses and other parts of glass or clear plastic. Some of the gadgets might have been distantly related to radar equipment—others were completely mysterious to him. All appeared subject to flexible adjustment in nearly any direction.

"No objection," reported the old spaceman on his return. "He acted like he was glad to get rid of us. I got him to scratch me a note about the radio freq' an' the Kayal lingo."

"What were they up to?" asked Chris as he lifted the rocket into the air.

"Well—they got the length of the old tub down pretty neat."

"What do you mean?"

"The ship plans show the length as two-eighteen. But a few years ago she grew two feet, account of new stern tubes."

"You mean these fellows got the new length?" asked Chris.

"To the radiating inch!"

The cadet was impressed at last. To doubt Old Jack's familiar knowledge of the *Comet* never entered his mind.

"And then there was somethin' else—"

"What?"

Chris thought he saw a sheen of metal in a shallow valley ahead. He peered at the screen and began to descend. He realized he had heard an impossible answer.

"*What* did you say?" he demanded.

"That's right. Not just length, diameter an' volume. They were measuring *time* somehow!"

"The age of the ship?" guessed Chris incredulously.

"I dunno but I translated his numbers into our years."

"And got what?"

"Fifteen years, twenty-four days, an' about ten hours."

Chris remembered discussions of the age of the *Comet* and Old Jack's service in her. It seemed impossible the strangers could have guessed so well. "Just about right," he murmured. "Isn't it?"

Then he had to divert his attention to the landing.

UPON leaving the airlock, they found several Telshans awaiting them. These led the Earthmen across the fifty-odd yards Chris had left between the scout and the nearest ship.

Might as well show them a little snap, he thought. When he got his hands on a set of controls they lost most of their clumsiness, which was probably the reason Ryle tolerated him in the control room.

The Telshans did not exert themselves to show the visitors the interior of their ship. Old Jack handed over the note carefully clutched in his gauntlet.

A space-suited Telshan scanned the characters scrawled on the heavy cloth-like substance and summoned one of his fellows from the ship.

"This one I can talk to," Old Jack informed Chris after a bit of experimental gargling. Chris told him Ryle's desires.

There ensued a period of jabber and counterjabber, parts of which apparently had to be referred to officials within the ship. Obliquely the discussion slid from the issue. The upshot was that the Earthmen lost a point to red tape.

"They say they'll measure the scout," Old Jack translated. "They don't think much of the guy that let us fly over here!"

"Would they give any reason for it all?"

"Well—sort of. It's kinda hard to put across general ideas when you just got a one-handed grip on the lingo but it's somethin' to do with controllin' their suns."

"Controlling interstellar traffic?"

"More'n that. They talked about predictin' consequences an' stuff like that. I bet they don't sneeze without asking!"

"Hmmm, that *could* fit in," mused Chris. "They'd be just the kind to want to know a ship's age for a one-visit license."

"Still, they got pretty careless with it."

"How do you know?"

"I remember when the framework of the *Comet* was first started back on Earth. They made a big splash in the newscasts about beginnin' on the first of the year."

"Well? Didn't the Telshans say over fifteen years?"

"But a little off. As good as I could figure on the way over here, countin' from the first day the *Comet* was worked on, these guys are three days over."

"Oh—three days!" scoffed Chris. "*You* could be wrong. Or maybe they can't guess as well as with real measurements. It's a lot to ask, no matter what radiation they judge by."

"Yeah—still, they were so doggone good with that length!"

They watched idly as the Telshans dragged out their gadgets. These paralleled the ones in use about the *Comet* but Chris could never get quite close enough to watch their operation. Some technician always needed elbow room to move something around whenever he wandered up to one of the machines.

Finally the interpreter informed Old Jack that the scout was registered and casually passed on some figures.

"What did he get?" asked Chris to relieve his boredom.

"Thirty-five feet for length," muttered the other, chalking the numbers on the thigh of his space-suit with a soft pebble.

"About right," admitted Chris.

"Nine an' a half for diameter—an' I'll take down the weight an' volume to check later. But they slipped again!"

"On what?"

Old Jack scratched some arithmetic in the soft soil. "Yep, I had it right," he said. "Eighteen-point-four-two-five years."

"What's that supposed to be?"

"How old she is, I s'pose."

"Huh! Well, I'll look up the dimensions later."

They returned to their rocket, rid themselves of their suits in the airlock and squeezed into the tiny control room. Chris copied the figures lightly in the margin of the log. "The Telshans aren't perfect," he insisted. "These scouts weren't built before the *Comet*, were they?"

"No, both of 'em were built to order afterward. *They* got the difference backwards."

"See?" said Chris. He stretched, managing to snap in half the forgotten pencil between his fingers. "Darn it! Well—what were your friend's parting words?"

"He said we could go anytime. I didn't quite get straight if he meant we're *allowed* to stay five days in their system or if he claims we *will*."

Chris stared at him askance but decided he had better contact Ryle on the telescreen.

The ensuing interview was definitely sour. Captain Ryle was not interested in the analysis of the scout. He could watch that sort of boondoggling where he was. If the natives at the other end were not any brighter-looking than those at the *Comet* Cadet Christianson's diplomacy was something to be pitied.

FINALLY, on the plea that it was already turning dark outside, Chris won a reprieve until planet morning. He and Old Jack made themselves more or less comfortable in two of the bunks behind the control room.

The scout was equipped to carry six men in a pinch. To Chris any time he had to sleep in it was a pinch. The only way he seemed to fit was flat on his back with his knees raised. He was glad when Old Jack woke him from his fitful sleep.

"It's sort of dawn," said the old spaceman. "If you can call that sick-lookin' yellow a dawn."

Chris yawned, gingerly straightening his kinked legs. "How long did it take, Earth time?" he asked.

"About thirteen hours. A day's longer by half here."

"Hunh!" said Chris. "Then we've been grounded going on two days. Ryle will eat my ears with pepper and salt!"

They had a synthetic breakfast from the scout's stores, then observed the Telshan ship. After several hours some of the natives appeared and busied themselves with minor tasks. Chris judged that it was time to call. They sallied forth, prepared for a short delay in coming to grips with any official of importance. . . .

The distant star crept up to the zenith as they plodded from one officer to another. The Telshan translator reappeared promptly enough but the arguments at every stage thereafter were lengthened by double translation. Near the end of the talks Old Jack added censorship to his duties.

"Oh, for Pete's sake!" Chris exploded at last. "All *right*—tell him we'll *take* the printed copy of their regulations! Ryle can spend his spare time translating them. Then he *will* know something nobody else does!"

The Telshan officer in the exit port of the space-ship produced a scroll. This Old Jack gravely accepted and passed on to Chris. He hissed a brief farewell. The Earthmen retreated. Chris immediately raised Sanders on the telescreen.

"Did you get any dope?" the latter asked.

Chris told him the essentials. Sanders laughed. "Don't expect *me* to break it to the Old Man," he said. "He left word you were to scorch a curve back here."

"We'll be right along," said Chris sullenly.

He called to Old Jack to check the airlock while he looked over the controls. When he received the all-clear, he fed in a little fuel to warm the tubes. Nothing happened when he pressed the firing button.

"Now what?" he growled.

"Trouble?" asked the other.

Chris checked his control panel, tried all the jets without result. After a quarter of an hour Old Jack went looking for dead fuses. Nothing was wrong.

"How about fuel?" exclaimed Chris. "Could the gauges . . . ?"

But the gauges were functioning and the tanks were full. Chris went so far as to put on his suit and make a tour of the exterior. He found no evidence of sabotage, nothing more alarming than a yellowish dust storm in the distance. The scout looked ready to go.

"I hate to say this," he remarked upon returning, "but I think we'll have to check the wiring and the fuel feed."

"Figured we would," agreed Old Jack. "I'll take the circuits if you'll do the fuel system."

Chris agreed. He had the messier part of the job but it was also the part that might require physical strength. That, he told himself, he had and to

spare. The wiring would be better off under Old Jack's defter touch.

In the midst of their investigations Chris was called to the telescreen. Ryle took in his appearance with one icy glance. "Whatever you're playing with, Christianson," he snapped, "drop it! Get back here at once. I want to be on the way."

The cadet explained his predicament. "Oh, *no!*" groaned Ryle. "Not even *you* could . . ." He rapped his fist on the table below his screen.

"Now listen!" he said coldly. "Try to understand. I shall use words of one syllable—short ones if possible!"

Chris waited, feeling the back of his neck getting red and fumbling for a place to hide his grease-covered hands.

"*I . . . shall . . . take . . . off . . . in . . . two . . . hours! There*—did you get what I mean?"

"Yessir. Get back there before, no matter how."

"Precisely—or be prepared to stay on here for some time. I don't intend to stall the mission in this stellar back alley just because *you* can't get your big rump off the ground!"

CHRIS saw a couple of grinning faces in the soft focus of the background behind Ryle. He reached out and killed the screen. Then he dared let himself speak.

"My, *my!*" murmured Old Jack.

"Did you *hear* him? 'Stay on here for some time!' Who does he think he is?"

"Don't let it worry you, Chris. Once we get this bottle going we could trail them to the next star—or even make our way back to the base. It's got power, even if it *is* snug."

"I'd rather catch the *Comet!*" snarled Chris, lunging to his feet, "just to show the old buzzard!"

He cracked his head on the low overhead and swore again. "Come *on!*" he shouted as he ran aft.

Four hours later, sweating, exhausted and filthy, he slumped in the pilot seat and prepared to admit that *he* had been shown. They had gone over every inch of the working parts in the fuel system, had put everything back without a single screw left over—but the scout still would not budge. Chris had the telescreen trained on the sector of the night sky where they might expect to see the *Comet's* rocket trail shooting off into space. Old Jack doodled on a sheet of paper.

"Wonder what's keeping him," he murmured.

"Yeah," answered Chris. "He's lost—what is it? three days by now. How can he bear it?"

"Nearly three days. Less one hour, Earth time."

Chris craned his neck to glance at him. "Why so exact? What's an hour?"

Old Jack shrugged.

Chris plucked his sweaty, grease-marked tee-shirt away from his belly, then reached to the deck to pick up his tunic and drape it over his shoulders. At first he had been too angry to care if Ryle left, then too busy to think about it. Now he was too tired to doubt it—or worry.

"*There he goes!*" exclaimed Old Jack.

A pulsating line of light climbed into the sky near the screen's horizon. The *Comet* was off. Chris watched sullenly for a few moments, then switched to the communication band in case he should receive a call from the ship.

"T'hell with 'em," muttered Old Jack. "Figures to stop on his way back, I s'pose, but we could get outa here by then!"

"It's a long way to the last base," said Chris dully.

"The Telshans could give us a tow an' drop us loose at interstellar speed to save fuel. We got stores for six men."

"Got it all figured, eh?"

Old Jack did not answer. In silence they watched the trail in the sky at intervals until it faded in the distance. At the end of half an hour there had been no call and the pulsations of light were too faint to be made out.

Chris happened to have the screen trained on the sky when the little sun flared there briefly. He jerked upright in his chair. *"Did you see that?"*

"Uh-huh," said Old Jack calmly.

Chris broke into a sweat and slapped the instrument into the other channel. Almost immediately, the audio came in.

". . . meteor swarm!" someone who sounded like Sanders was gasping. "Can you hear me, Christianson? Detectors okay but too much stuff—and too heavy! No chance to maneuver . . ."

Chris was as glad the video had failed.

". . . whole after end gone . . ." wailed the voice, fading.

Chris shifted to the view of the sky. The flame had shrunk to a tiny dot. Even as they watched it died and the stars resumed their normal prominence.

"Fifteen years, twenty-four days," murmured Old Jack. "I ain't gonna check them up on the ten hours."

Chris swiveled around to stare at him. Sitting on a locker the old spaceman was intent on the screen, which was beginning to show the slashing sparks of a meteor shower. Another pulsating trail of light began the long climb into the sky.

"Gotta give 'em credit. They're goin' up to see what's left. Keep a nice orderly system, don't they?"

"Did you *know*—this would happen?" asked Chris huskily.

Old Jack's gray eyes regarded him patiently. "S'pose we say I wanted to be where I could find out." He crumpled the paper he had used for his calculations.

"Y'know, when you been in space long enough, you can believe anything. O' course Ryle wouldn't a-seen it that way. But if them Telshans thought they were scalin' off the total time-life of a ship, like measurin' a shelf-board with a ruler, I figured I'd go along with 'em fer the time being."

Chris felt cold. He pulled the tunic around his broad shoulders again and stared into the screen.

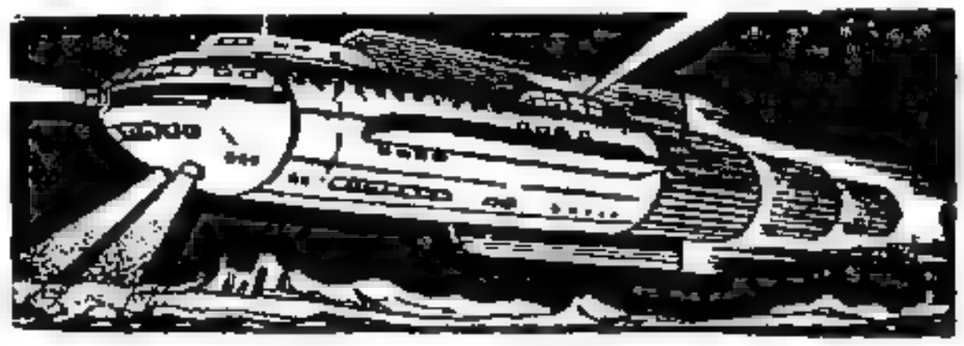
"If there's any of 'em left," the other murmured, "the Telshans will bring 'em down. If not—well, we were lucky!"

The light-trail on the screen spawned half a dozen small offshoots. The Telshans must be sending small craft into the swarm. Chris felt very lonely, thinking of the distance back to the *Comet's* last base, let alone to Sol.

"Well," said Old Jack, "I might's well splice them wires now." He rose from the locker. "Tomorrow, I'll remind the Telshans they said they could give us a flyin' start if we ever needed it."

Chris merely raised his hands and dropped them limply to his thighs. *Might have known,* he thought. "*I* was lucky," he said, "to be along with you."

"Aw—" Old Jack paused in the entrance to the corridor. "If we ever get back here remind me to buy a watch! The local products must be somethin' to brag about!"



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WITHIN the PLANET

By WESLEY ARNOLD

When the Great Earthquake occurred, ageless men from the depths of the Earth rose to take their places among us!

IT WAS precisely 8:32 P. M. on October 11, 1952, when seismographs in all parts of the world told of an unprecedented shock in the southeastern United States. Practically all seismological stations on the North American continent were put out of commission by the force of the initial quake. When they were restored to working order after many hours, they showed violent tremors continuing, but diminishing in intensity.

By that time, in a government relief plane, I was halfway to the devastated area.

There was little point in speculating about what I would find when I got there. Although I had covered the disastrous Kansas-Missouri Flood for my paper I knew that the present catastrophe so overshadowed all earlier natural calamities that they would be almost useless even as standards of measurement. It was utterly impossible to imagine in advance the scenes of desolation and horror that must have been caused by an earthquake that had laid waste an area as large as a good-sized state and included portions of four states.

Accordingly, with the matter-of-factness with which the experienced reporter prepares to greet even the greatest of disasters, I settled myself for the journey, resolved to keep my mind clear of preconceived ideas and open to the impressions that would meet me at the scene of the disaster.

I was startled to hear the words, "Hello Jim!" spoken at my elbow. Looking up, I recognized the frail, little bespectacled man who was standing in the aisle beside me.

My acquaintance with Professor Ernest Burlingham had begun three years earlier when I sought an interview with him on his announcement of the completion of his *Electrical Theory of Matter*. I had shown so much interest in his work, and an understanding so much better than he expected from a mere reporter, that he had invited me to return to his home. The acquaintance ripened and during the next year I often visited the famous scientist, who instructed me with the interest of a godfather. I had not seen him for more than a year, now.

Ernest Burlingham was of a most deceptive appearance. Although he appeared weak, absent-minded and on the whole insignificant, I had reason to know that there were few men, if any, who could wield a more devastating power than he, or who could be more thoroughly aware of their surroundings.

"Scavenging again?" he asked, smiling. He had always smiled at the tendency of newspapers to play up sensa-

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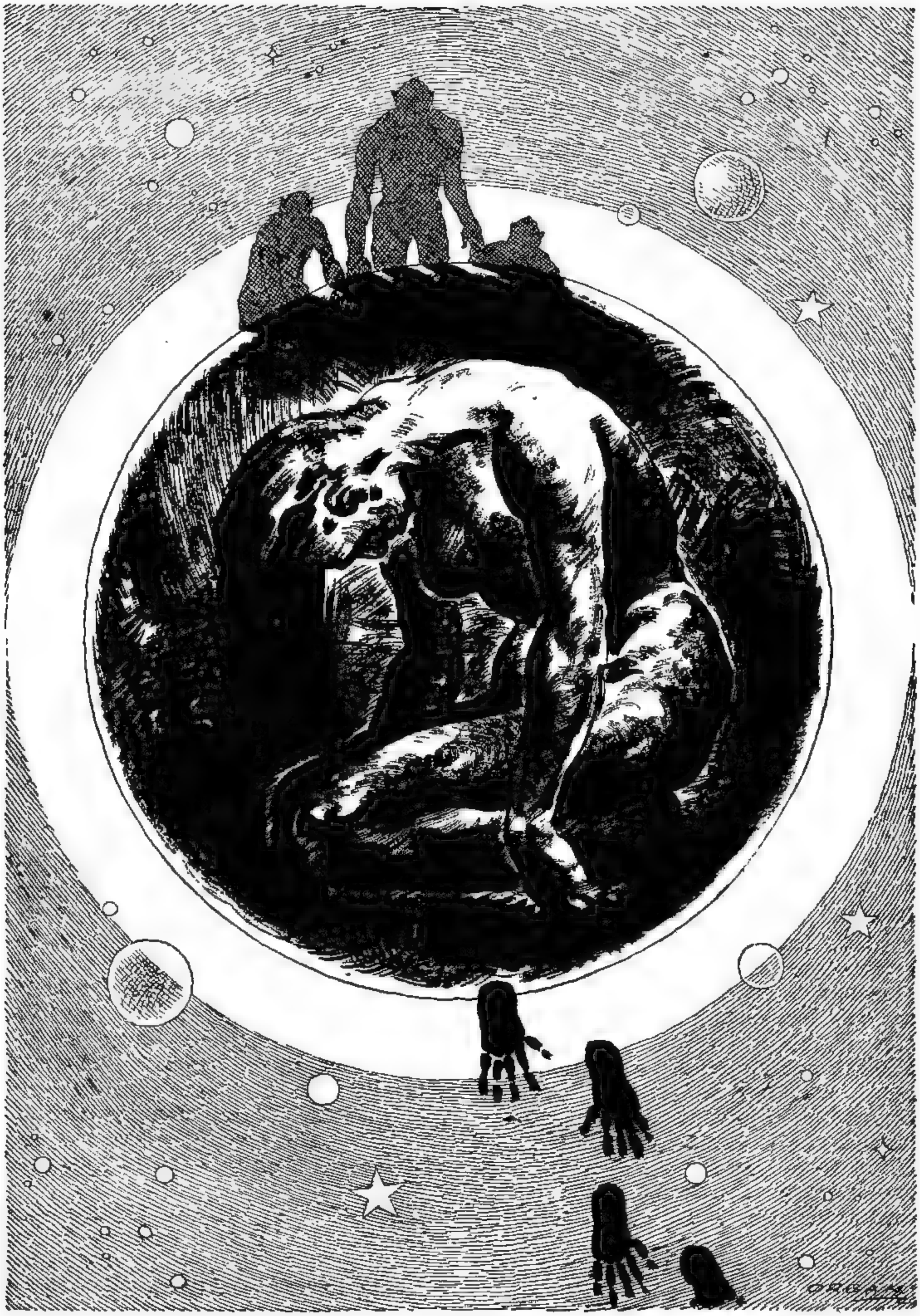

tional crimes and disasters while, in his judgment, they neglected the advances of science. I had long since decided that this was the one question upon which he refused to be open-minded, and had ceased to argue with him on it.

"The newspaper man and scientist seem bound for the same destination this time," I observed slyly.

"That is often the case," he countered, "but while the scientist goes to lend the aid of his knowledge to sufferers, the newspaper sends its representative to capitalize their plight."

To change the subject I asked him about his recent work. We found seats together, and I was quickly engrossed in his attempt to explain life and mind as phases of electrical activity. But, as his voice droned on, I found it increasingly difficult to keep my thoughts on the soul-stirring matters which he, with his kindly interest, was expounding to me. They kept reverting, instead, to the horror toward which our plane of mercy was speeding at more than 450 miles an hour. I heard my companion's voice going on and on. I was becoming drowsy and lost the thread of his talk. Then one statement of his penetrated through the fog in my brain—

". . . this thing has interrupted my work, but when the opportunity is unique one must drop everything to seize it."

What, I wondered suddenly, was the explanation of Ernest Burlingham's presence in the relief plane? Its passengers included, outside of us, only some physicians, a couple of Red Cross officials, and Major-General Hugh Lombardi, who was to assume charge of troops now speeding from all directions toward the desolated district. In addition there was a quantity of medical supplies urgently needed by the earthquake sufferers. Burlingham was not a medical man, and I was at a loss to understand just what his function was to be.

Feeling that our relations were friendly enough to permit it, I put the question to him, wording it so as not to offend his vanity.

He hesitated before replying. "I am going to investigate certain vague reports that have reached me. It is possible that my work will be the most important—from a scientific and not from a human viewpoint—that is to be done in connection with this catastrophe. We are going to see, of course, the greatest upheaval of the earth's surface that has occurred in historic times—possibly the greatest since the earth's crust finally solidified. Who knows what it may have revealed?"

With that, Burlingham withdrew into a shell of silence. I pondered in vain for an inkling of what he might have meant. Although I was unable to explain his words, I knew, because I knew him, that they had not been uttered lightly.

The next two hours I spent making the acquaintance of the medical men aboard, and forming contacts with the Red Cross officials for use as news sources. Then I became aware that we were approaching the devastated area. I took my place by a window to get as early a view as possible of the ravages of the earthquake.

FIRST news reports filtering out had indicated that the dead were numbered in tens of thousands and the homeless in millions. Fortunately, Indian Summer weather prevailed; but the threat of winter hung over the homeless survivors of the catastrophe. Relief measures, however, were undertaken promptly and with the efficiency characteristic of Americans in such emergencies. The airplane in which I was riding was one of the first to speed to the scene with men and supplies for relief work.

Flying low we saw first a large barn lying in ruins, then a concrete bridge torn loose from its moorings and fallen into the swollen stream below. Within ten minutes we were passing low over

scenes of complete destruction. Not a building remained standing; paved roads were buckled and cracked and resembled crumpled strips of cardboard; every bridge we sighted was down; ruin and desolation were everywhere. Along the side of what had been an important highway stretched lines of refugees; men, women and children straggling, with loads of household goods and valuables, toward the edge of the devastated area. In the line were automobiles and horse-drawn wagons loaded with goods, moving slowly over the soft ground, for the roadway itself was impassable. We saw them passing laboriously through ravines which formerly had been bridged, and making long detours to reach fords across streams. Above us was a stream of private and commercial planes transporting people and their belongings to safety. I became aware of Burlingham at my side.

"You are looking now at the worst part of the destruction," he said. "The worst effect of earthquakes is felt at a distance from the center of the disturbance, in a circular band, that is. Earthquakes originate, as you may know, at some point under the earth's surface, from one to 30 or more miles down. That point is called the centrum and the point on the earth's surface directly above is called the epicentrum. The force of the disturbance moves outward from the centrum in spherical waves, exerting its force downward as well as upward. As we go away from the epicentrum the waves of disturbance become more lateral in direction, and we observe a true undulation or wave in the earth's crust. Trees may be seen to incline until their branches touch the earth and then straighten up as the wave passes on."

"What happens at the centrum to cause the quake?" I asked.

"Probably the collapse of the roof of a huge cavern, or the buckling of a stratum under a severe strain."

The scenes below us were constantly changing as we progressed, yet they remained curiously the same in that they told a story of complete destruction and horror. At length the pilot banked around and the plane headed eastward again. Twenty minutes later we came down to a smooth landing at the field outside Scottsboro, where temporary relief headquarters had been established on the edge of the zone.

The entire town, like many others, had been turned into a huge hospital center, barracks having been erected everywhere for the relief workers and officials. Leaving my belongings in a room assigned to me, I immediately set to work gathering the news. I worked uninterruptedly and was able to file eight columns for the final edition of the *Globe*, giving to the best of my ability a description of the scenes of destruction I had observed and, in the vivid stories of survivors, an account of the occurrence of the earthquake. I told of the feverish scenes of terror when, to the ugly tone of a clashing and rumbling from the earth's interior, homes and office buildings crumpled about the heads of their occupants.

Some of the stories told me by survivors of the shock were so fanciful that I disregarded them completely. Such was that of an old farmer whom I interviewed in a temporary hospital where he was lying with hardly an unbroken bone. His home was located near the center of the quake area, on a farm outside the town of Monroe. He told me how he had been walking along the main road leading from the town to his farm when the shock came. He had been flung from his feet, but hadn't exactly fallen; the ground came up and slapped him. When he awoke, he discovered that he was lying on the hillside a hundred feet from the road along which he had been walking. He was in great pain, but managed to raise himself on one arm and look about. He came to the conclusion then that he had been thrown through the air by the shock and that his life had been spared only because he

had fortunately been plunged into the branches of a tree which broke his fall to the ground.

The farmer, a simple man, told me shakily that he either had died or had been on the verge of death. When I asked him to explain, he related the following:

"I was unconscious most of the night, except for times when I came to. I was in great pain all over and it was a mercy when I could be unconscious. Finally I was sort o' numb and didn't hurt so much. I turned my head and looked down the hill and on the other side of the road, in the field, I saw—three demons. They was coming in my direction. I must have fainted, or died, or something. I didn't know any more till I felt hands touching me and saw a man bending over me. There was another man with him, and they carried me to an automobile and put me in it. That ride was terrible, when I was able to feel anything. I would have died on the way but after seeing those demons, I didn't want to die."

"What did the demons look like?" I asked.

"Not like the pictures," the farmer whispered. "They was more like big gorillas. They had long arms that came down to their feet. They didn't have any hair and they didn't have any eyes, just hollow places where their eyes should have been!"

I WAS not long in learning that the old farmer's story had gained considerable circulation. A similar experience had been claimed by a farmhand who escaped injury and who aided in carrying out of the area the maimed bodies of less fortunate neighbors.

The next day the story had become such a topic of interest that I mentioned it in telegraphing my dispatch, without, however, giving it any credence. I attributed the story to the nervous reaction of those who had come through the disasters, and quoted it to show the state of nerves of this community so staggered by terror and death.

That afternoon I went to General Lombardi's headquarters. In the anteroom I was surprised to see Ernest Burlingham, whom I had completely forgotten in the stress of work since our arrival together. He immediately called me aside.

"Jim, my boy," he said, "you must do something for me."

"Glad to, if I can."

"I must get into the interior of the quake area as soon as possible. I know how busy General Lombardi is and how buried in his rescue work, but it is absolutely essential that I get an airplane and pilot to take me to the vicinity of Monroe this afternoon. You had better come along, I think, because I can promise you something of interest. The question is, can you get the general to furnish a plane and pilot?"

I looked at Burlingham curiously. What could he have up his sleeve?

"Well," I said, "I'm going in to see General Lombardi now by appointment. I'll put your request to him and try to get it granted, but it's impossible for me to go with you. The big news is coming out of this town now."

"Suppose I could promise you even bigger news?" said Burlingham. "I do not say I can, but—suppose I could. Suppose I told you that if you come with me you will get the biggest story that any newspaper ever published?"

"In that case I'd go with you, of course. Can you promise me anything like that?"

"No. I promise nothing. But I firmly believe that if you accompany me to Monroe you will get such a story!"

"I'll see what I can do," I told him, and passed through the door into the general's private office. When I emerged after ten minutes he looked at me eagerly. I handed him a paper.

"This is an order putting a small plane and a pilot at your service for twenty-four hours," I told him.

"Splendid, Jim! Thank you a thou-

sand times over. You will come with me?"

I turned the problem over in my mind. My duty to my paper was to cover the news and not embark on a wild-goose chase. Nevertheless I had a great deal of respect for Burlingham's judgment. It might be, as he said, that big news was hidden in the interior. At any rate I could accompany him and probably be able to return at any time within the twenty-four hours, after having inspected the damage of the quake over its centrum. In the meantime my paper could depend on the news associations to keep it informed from relief headquarters. On the spur of the moment I made up my mind to accept Burlingham's offer.

"I'll be ready in half an hour," I said, "after getting off a dispatch to the *Globe* and letting them know my plans. Where shall I meet you?"

"You have less to do than I have," he smiled. "Take this order with you and have the plane in readiness to hop off in an hour from now. I will meet you at the flying field office."

WHEN he finally arrived, a few minutes after our scheduled time, everything was in readiness and I was chatting with Lieutenant Richard Williams, who was to pilot us. Burlingham, to my surprise, was carrying a large-bore repeating rifle. A burly laborer tagged at his heels with a huge coil of small but stout rope, which he placed on the floor of the plane at the scientist's direction.

"They may be necessary to my purpose," was the only reply he made to my inquiry about his strange equipment.

Fifteen minutes later we were over the ruined town of Monroe. Burlingham, who was watching the ground below closely, then directed the pilot to fly in a southerly direction, and then to veer to the west and return. He was perfectly silent until on the return trip I heard an exclamation of satisfaction from him. He pointed out a fissure in the earth's surface, a great hole a hundred feet wide and five hundred feet long, which had evidently been opened up by the quake.

He indicated to Lieutenant Williams that the fissure was the objective of our trip and that he wished to land near it. The pilot accordingly circled lower, and soon brought the plane to the ground in a soft-field several hundred yards away. Burlingham was out of the cabin almost before the plane came to a stop. He started at a rapid pace toward the edge of the hole, while I jumped out and followed, both because my curiosity had been roused to a high pitch and because I wished to see that no harm befell my strange friend.

I reached the brink simultaneously with the professor and we stood side by side looking down into the great crevice. It was certain from this closer view that the fissure had been opened up by the earthquake. The jagged walls gave evidence of having been torn forcibly apart. Huge broken rocks stuck out of the sides. The bottom of the abyss was lost in the blackness which seemed to fill it like an impenetrable liquid. I estimated, however, that I could follow the walls of the fearful hole down at least a thousand feet before the blackness enfolded them.

A succession of slight tremors, punctuating the steady vibration of the earth, had continued for two days since the main shock. At this moment a distinct quiver, running through the ground, forcibly impressed upon my mind the circumstances attending our discovery of this giant chasm.

I had almost forgotten those about me until I felt Burlingham's hand on my arm. Williams had come up also, and was peering into the hole with awe. At the professor's suggestion we lay down prone so that we could look our fill without the danger of being overcome by vertigo.

The walls of the hole, as I have stated, were not smooth and perpendicular;

but jagged and jutting, much as the edges of a cake that has been pulled in two. Although I was vastly impressed with this evidence of the earthquake's work, and very curious to know what a trip to the bottom of the fissure might reveal, I found it impossible to fix my gaze into the abyss for any length of time. Accordingly, I straightened up to a sitting posture a safe distance from the edge, so that I might recover my sense of equilibrium before attempting to stand. I noticed that Burlingham and Dick had already left my side and were walking along the brink of the hole some distance away. As I watched, the professor suddenly dropped to his knees, and I heard an exclamation of triumph from him. Our pilot also seemed quite interested in something on the ground, so I walked to where they were kneeling. They were examining an impression in the soft sandy earth.

I WILL not say that I was surprised at what I saw, for that is not the word. I was really stunned—but not surprised, because I had almost expected something strange. Since the time Burlingham had first suggested that we visit the earthquake's epicentrum, I had felt, in some curious way, that we were going in connection with the weird stories that had gained so much credence among the survivors. In other words, I felt that our trip had something to do with the "demons" the old farmer had claimed to have seen.

The scientist and Lieutenant Williams were looking at a footprint which even I realized at once was not that of man, ape, or any other animal I had ever known. I can best describe it by saying it looked to me like the print of a man's hand, the fingers slightly spread, but with a flat palm and a heel at least eight inches long. Or, to take it the other way, it might have been made by a flat-footed man with fingers instead of toes.

As I came up, Burlingham drew a pocket ruler and began measuring the impression, and its various parts. Pausing to make a note of one of the dimensions, he asked me rather peremptorily to gather some large stones. I complied and by the time I returned with them he was through with his measuring. He placed the stones around and over the print to protect it, and then arose. There was a light in his eyes that I had never seen before, as he turned to us.

"That is the footprint of a creature that science has no records of," he said excitedly. "If possible, we must find an impression of its hands also. Look along the edge of this opening in the earth. The creature must have left a print in climbing over the top."

"There's another print over here," put in Williams. "I just noticed it."

The professor almost darted to the spot at the edge of the abyss that Williams indicated. "Ah! That is a hand, and here beside it is the foot." He bent over and examined the impressions for a moment and then again stood up.

"What sort of critter made them?" I asked.

"Well may you ask, my boy," he exclaimed. "The prints we have seen were made, I am convinced, by something the like of which had never been seen on the earth's surface until two days ago. And yet, although I have not seen the animal, I can give you a partial description of it, and something of its history. Let us move away from the brink of the hole and I will tell you what I have deduced. Then we must make our plans at once. I shall ask your advice.

"I can best begin," he continued, when we had moved away and seated ourselves on some rocks, "with the assertion that no animal known to us could have made the footprint we just saw. And yet the animal that did make the impression must have a resemblance to both man and the higher apes, and therefore must be an integral part of the scheme of life as it has evolved on the earth through millions of years. In other words, this creature of whose ex-

istence we have proof had a common origin with mankind. It must have branched off our lineal tree even before the line of the higher apes did, and yet I have reason to believe that this creature must more nearly resemble mankind than the apes.

"As you undoubtedly know, mankind's progress would have been impossible without the peculiar construction of our hands by which the thumb is able to oppose the four fingers, to pick up and hold things, to mold and construct things by the use of them. The apes have never fully learned this trick because of the construction of their hands. But this creature whose tracks we have seen has not only developed hands like ours, but its feet have the same power of grasping things that our hands have. For practical purposes, therefore, the creature may be said to have four hands. Think of what that means. It could construct a delicate watch with its feet, or with its hands. In fact both its fingers and toes are longer and more delicately molded than our fingers, so that it undoubtedly is a better workman."

I LOOKED up and caught a wink from Lieutenant Williams, but for my part I did not share his obvious disbelief. After all, *something* had made those curious impressions in the ground. Moreover it seemed probable now that the stories of monsters having been seen in the vicinity did not spring from mere hallucinations and that the creatures the scientist described might actually exist.

"But is it possible," I asked, "that these creatures have lived and developed somewhere underground?"

"It is not only possible, but obviously true," Burlingham declared. "From where else could they have come? I promised to give you something of the creature's history, and I will do so.

"To begin with, he probably lived on the earth's surface. It would be reckless for me to say how many millions of years ago, but it was long before the development of anything like the present race of mankind. We have reason to know that cataclysmic upheavals of the earth were fairly common in those days, but the one which imprisoned these creatures in the bowels of the earth must have been greater than anything we have ever imagined. In some giant upheaval a huge portion of land must have sunk—possibly to a depth of twenty or thirty miles. The earth closed in over it, and a huge cavern was formed in the depths of the earth. We cannot even imagine the terror that must have gripped the animals engulfed thus in a subterranean prison. I think perhaps an entire tribe of these creatures, then in an early state of development, were swallowed up in the earth. They found themselves in utter darkness and their ears must have been assailed by the most terrible noises.

"Within a few days the noises ceased and they found that they were still alive, although entombed in utter night. They must have had a supply of food, or they would have starved before they learned their way about in their new world. You must remember, however, that they were primitive animals. They found water, probably in the form of a lake fed by springs and emptied by absorption in the earth. The disturbance must have carried down, along with these creatures, other forms of animal life and also vegetation that was then possibly in fruit. They began to discover that their world had not changed otherwise, but had simply sunk to a depth in the earth. Life is persistent, and somehow they managed to come through the first few months, and by that time they had made enough adjustments to their new environment to find life easier.

"One thing we must realize is that the air pressure in the vast cavern must have been much above what they were accustomed to. The pressure at the earth's surface is about 15 pounds to the square inch and if we were to go down in an open shaft it would double

about every two and three-quarters miles, so that five and a half miles down an open shaft, the pressure would be about 60 pounds per square inch. However, in this cavern unconnected with the earth's surface the pressure of the air would be determined by its density. It would depend upon the volume of the air entrapped and the size of the cavern. I think it is safe to assume that they suffered discomfort for a while from increased air pressure, but since this is a force exerted in every direction, they soon adjusted themselves to it. Vegetation must have undergone some alteration enabling it to exist in a changed form. And so, in toto, we have imagined an entirely new world in which the creatures made prisoners by the upheaval were able to exist and to develop on lines altered to suit their environment. This development, bearing a kinship to the evolution that was taking place above them, went on through the centuries. One important point is that these subterranean creatures, having no use for eyes or organs of sight, gradually lost these organs through atrophy. The skin probably overgrew their eyes in time.

"Then, after centuries, the earthquake which has brought us all here opened up an exit from their prison, which they had long regarded as their natural home, and gave them access to the earth's surface. What is to result from this, I cannot tell you. I think we may assume that these subterranean ape-men, who may be as far along the road of evolution as we are, will desire to remove themselves to our more spacious world. We three are on the spot to witness what follows and we have evidence that one, at least, and probably more, of the creatures has been close to the spot where we are seated at this moment."

I had been so absorbed in Burlingham's exposition that I had forgotten my surroundings, and as he stopped, with a wave of his hand toward the spot where he had examined the strange footprints, it seemed to be that I had been transported from a dark and loathsome place back to the sunshine. Williams, I think, felt a similar impression, for I saw him looking around him as if to take to himself the pleasure and certainty of the bright sunlight. The scene we looked at was cheerful only by comparison, however, for ruin lay on every hand.

"Well, I don't wish to seem disrespectful," said Williams, "but I couldn't believe a thing like that and still think I was sane. It doesn't seem reasonable to me to believe anything of that kind could live miles underground."

Burlingham jumped to his feet nervously.

"Maybe this will convince you," he whispered excitedly. "Here comes one of the creatures toward us! Keep quiet!"

DICK and I sprang up and looked in the direction he indicated. Swinging toward us across the rough ground, with head bent low, was altogether the strangest animal I had ever seen. Although it was about the size of a gorilla, with huge chest and shoulders, and arms reaching almost to the ground, it still resembled a human being more than it did an ape. Its head was very much the shape of the human head except for the enormous size of its ears; but even at a considerable distance it could be seen that the creature had no eyes, but only slight indentations below the brow completely covered over by skin. It was entirely hairless, with a smooth, slate-colored skin, and it was naked except for a breech cloth. This strange creature was carrying swung across its shoulder the body of a dead or unconscious human.

I say that this creature was swinging along toward us, but I must stress the point that the very moment after I caught sight of it, it stopped short in its tracks. After standing indecisively for barely a moment, it dropped to the ground behind a hillock. Simultaneous-

ly, Williams also held his ground, and we three looked at the spot where the creature had hidden.

"There's no need for us to hide, since it has no eyes," Burlingham said, as much to himself as to us. "But how, in the name of seven times seven devils, did it know enough to hide from us? Never mind, we'll think of that later. Come over with me to where it is—but be careful not to make any noise. The wind is toward us, so it is not likely to smell us."

Stepping carefully we crept toward the rising ground behind which the creature had hidden. I admit that I went with trepidation, for the creature's tremendous physical power had been apparent in the short glimpse afforded us. Nevertheless there were three of us, and both Dick and I were in good physical condition. It was unlikely that the creature could overcome all of us in an encounter. Moreover the risk must be taken, for while I felt sure the body it was carrying was that of a victim of the earthquake and that it was already dead, we all felt instinctively that we must prevent the creature from vanishing into the depths with it.

We crept along until we had reached the crest of the ridge and could look down the far slope. To our utter astonishment it was completely bare of any form of life. I jumped up, feeling that I was going or had already gone, insane. At that moment I saw the creature rise up at the far edge of the small ridge and run toward a point between us and the edge of the crevice.

"Head it off," shouted Williams breaking into a run. I followed at his heels while Burlingham trailed along at the top of his speed—all of us shouting in the hope of frightening the creature. Apparently we succeeded to some extent at least, for it dropped the body it was carrying and headed directly for the abyss. A second later we saw it vanish over the brink at the exact spot where we had seen the prints left by its hands in climbing out. We followed to the edge and saw the creature making its way easily down the almost perpendicular wall. As we continued to watch, it finally vanished into the black depths. Williams was the first to speak.

"I want to take back what I said before, sir," he said to Burlingham. "I'm darned if I know what to think now, but I guess the first thing for us to do is to see about the fellow over there."

IT WAS the body of a man dead two days. Williams and I dug out a shallow, temporary grave for it, and then joined Burlingham, who had taken a seat on the ground nearby.

"Now that we've seen this uncanny animal, what can we do about it?" I asked the scientist. "Do you think there's any chance of his coming back with reinforcements and doing some damage here?"

"Anything may happen," Burlingham replied solemnly. "I am stunned by what I have seen, although I realize that you and Lieutenant Williams do not fully understand the situation. I think it very likely that these creatures will appear on the surface in force within a short time. The first thing we must do is to summon aid, and I will request our pilot to return immediately to Scottsboro and ask General Lombardi to send reinforcements before night."

"Don't you think we could handle them?" asked Williams. "You know there's a machine-gun on the plane yonder. If necessary we could take to the air and strafe them from above."

"I would not care to risk it." Burlingham shook his head. "Not for myself, only, but I would not risk failure in the face of a danger that may threaten the whole countryside, and, for that matter, the whole nation. I can tell you now that our subterranean visitors will prove the most formidable opponents you have ever imagined. Every minute counts and I must repeat my request, Lieutenant, that you take off at once."

"You're the boss," replied Williams, "but it won't be necessary for me to

fly back to Scottsboro. I can get headquarters on the radio from the plane. What shall I say?"

"Tell General Lombardi that a grave peril faces the country and ask him to send all his available men. Suggest that he himself make a flight here so that he may realize the situation."

As Lieutenant Williams moved off, the scientist called him back and requested him, on his return, to bring the coil of rope and the rifle which were in the plane.

"Don't underestimate these creatures, Jim," he said, turning to me. "You can judge the thing's physical strength—it is easily double that of a man. Now it is my firm opinion that the monster represents a race of higher intelligence and reasoning power than man himself."

"Impossible!" I objected. "The creature was so brutal, so crude and misshapen that I can not possibly associate the idea of intelligence with it."

My friend smiled wryly. "It is sometimes possible to judge a man's intellectual power by his appearance, although not always. In this case, however, the criterion is useless, for you are attempting to judge this creature by the standards of a human being, which it is not. My conclusions are based on firmer ground.

"In the first place, the creature's head and brain cavity are fully the size of a man's. Since it is without the power of sight it follows that the brain cells which, in man's mind, are devoted to the purposes of sight, are made up for in its brain by other cells. That is, if the creature's brain is the same size as man's, its mental powers, disregarding that of the perception of light, must be greater. Whether these are merely an extension of the mental powers we recognize, or whether the creature has powers that we know nothing of, is speculative. I incline to the view that both of the possibilities I suggest are true. In the brief encounter we had with the individual of this subterranean race it out-thought us at every step, and exhibited the most amazing mental processes. Let us go over what happened.

"When we first caught sight of it, the creature, I believe, was following its own spoor back to the crevice from which it had emerged. Its senses of smell and hearing, we may assume, are highly developed to compensate for the lack of sight. Now at the very moment we saw the creature, or barely a second afterward, it sensed us by some means, despite the fact that we were very quiet and that the wind was from it toward us. Possibly our mental agitation betrayed us by thought-waves which led it to know that sentient beings were in the neighborhood. The creature was doubtless as much surprised as we were at the sudden encounter, but it acted much more intelligently in the circumstances. We knew, or felt sure, that our visitor from the underworld had no eyes, yet we instinctively and quite naturally tried to hide from it. That was not intelligent, but an emotional reaction based on fear.

"On the other hand this creature, whose ancestors for a million years have lived in absolute darkness, and who presumably had no conception of the sense of sight, tried to hide from us. How could it have realized that we were able to *see*, or that there was such a thing as seeing? I believe the answer is that it had already evolved a conception of sight by pure reason, something that no man would be able to do. We have never been able to imagine anything that was not based in some way on our experience and to do so would require mental powers of an entirely different *nature* than we possess.

"This creature, as nearly as I can explain it, must have felt some reaction to the light of the upper world. Then he had had an opportunity, as we know, to examine the body of a man and to discover that it was very similar to his own. He must have speculated about the man's eyes. I assume that, putting two and two together, the creature de-

cided that the body's eyes were in some way connected with the light which it had sensed. But how did it make the unbelievable jump from this point to an abstract conception of the power of sight? It is so uncanny, that it stuns me."

HE CEASED speaking and stood up. I saw that Williams was returning from the plane and, in accordance with Burlingham's request, was bringing the load of rope, staggering under the weight. He dropped the large coil near us, and leaned the rifle against it.

"The general is coming out, himself, to see what it's all about," he announced cheerfully. "I think he suspects all of us being crazy but the last word was that he would be out later this afternoon, probably within an hour."

I looked to the west. Probably three hours of daylight remained. Burlingham had the same thought.

"That is a relief," he said, "for I do not doubt that we shall need the advice of General Lombardi himself about the situation. Meantime we must do what we can, and I propose to descend into the hole as far as the length of rope, about a thousand feet, and see what information I can gather."

Lieutenant Williams and I spoke up at once in protest. If it were necessary for anyone to go into the hole, it certainly should be one of us, and not he.

"Unfortunately, neither one of you would do," the scientist replied rather brusquely. "I do not know what may be discovered by a trip a thousand feet down in the hole, possibly nothing, but I prefer to have a look myself."

Silencing our protests, he began tying an end of the rope about his chest. I realized that nothing we could say would have any influence with him. Unless we were prepared to restrain him by force the best thing was to lend him what aid we could in carrying out his hare-brained scheme and getting it over as quickly as possible. Accordingly, I busied myself with fastening the rope tightly under his arms. The professor's instructions were simple. He wished to be lowered into the abyss to the extent of the rope's length. Williams and I were merely to stand by until we got his signal to raise him. He would shout when he wished to be pulled up, or, if it proved impractical to communicate in that way, he would give the signal by firing the rifle which he carried strapped over his shoulder.

Our preparations were completed quickly and Burlingham calmly lowered himself over the edge and began his descent, while Williams and I kept the rope taut and gradually let it out as he went deeper. The wall of the hole was slightly inclined outward from where we were standing so that we were able to watch the scientist's progress for some time. Lower and lower he went, disappearing at times under an overhanging rock and then coming in sight several yards further down. Frequently he dislodged fragments of stone with his feet or hands and we could hear them rattle down the side of the wall until the sound finally died away. His descent was steady; his form steadily becoming more indistinct in the darkness until finally we were unable to see him. There was only the white rope stretching down and disappearing into the forbidding and ominous blackness. At length we came to the end of the coil. We retained about ten feet of rope, which we snubbed around the stump of a tree. Then we made ourselves comfortable at the edge of the abyss to await the signal that Burlingham was ready to be hoisted to the surface again.

I CONFESS that I waited with forebodings of disaster. I blamed myself now for not having restrained Burlingham by force from taking such an unnecessary risk. I might even have convinced him against making the attempt on the ground that his advice and leadership in this crisis were invaluable to humanity.

Williams felt as I did, and we had

almost persuaded ourselves that it was our duty to pull the scientist up immediately without waiting for his signal, when our ears caught the sound of an airplane's motor. The plane, flying low, circled overhead and then came gently to rest near where our own plane was standing. Two men, one of whom was Major General Lombardi, alighted and walked toward us.

Williams explained the situation to the general in a few words. He peered with interest into the abyss, his eyes following the rope down until it disappeared in the depths.

"This is the greatest nonsense I ever heard of," he said impatiently.

"You forget that we actually saw one of these creatures," I reminded him. "Moreover, if you will look I will show you the impressions of the thing's hands and feet."

I indicated the spot, some thirty feet away, where the pile of rocks protected the creature's footprint. General Lombardi stalked over to it. The general's pilot had joined up and, leaving him and Williams to guard the rope and listen for Professor Burlingham's signal, I followed General Lombardi and exposed the footprint. The general examined it with the same interest we had exhibited earlier, and I gave him a brief record of our encounter with the subterranean visitor, as well as a description of the animal and some of the professor's theories about it.

Suddenly we heard a warning cry from Williams. I turned my head and then clutched the general's arm with a complete lack of courtesy for his rank. Both of us sprang to our feet. There, less than thirty yards away from us, stood three creatures similar to the one we had seen. My heart jumped to my mouth, not so much in fear for myself as for Professor Burlingham, whose position, I realized, was now exceedingly precarious. The trio from the underworld made no movement for the moment, but simply stood in a group and appeared to confer. General Lombardi touched my arm, and I turned and saw that he had his service revolver in his hand. I started to remonstrate, doubting that the revolver could inflict a mortal wound on the animals, but he halted me.

"Shout and try to frighten them away until we can pull up your companion," he said.

Immediately he pointed the revolver in the air and fired. Both of us shouted at the top of our lungs and Williams and the general chauffeur-pilot joined in.

The three underworld creatures seemed somewhat taken aback by this. They held their ground, however, and we could hear a chattering as they bent their heads closer together. Then without the slightest hesitation, they started at a rapid pace directly toward the general and me. The general fired one shot at them, but missed, I think, as we retreated toward the rope. Dick and his companion had already begun to haul the professor up. It was well that General Lombardi and I moved when we did, for the trio lumbered directly over the spot where we had been standing and disappeared rapidly, one at a time, over the edge. A few yards away, Williams and the soldier were pulling the professor to the surface as rapidly as possible without dragging him across the jagged rocks, and there was nothing I could do at the moment.

WITH a terrible feeling of helplessness, I dropped prone on my stomach to watch the progress of the creatures down the wall of the abyss. They were descending rapidly and smoothly in a perpendicular line about twenty feet from the rope which was bringing Burlingham to the surface, and they seemed to be paying no attention to it, presumably not knowing that it was there. I doubted, however, if it were possible for a human being to go so close to them without attracting their attention. Accordingly I was not surprised when I saw them stop their descent about four-hundred feet down. Dimly I could

see the form of the professor as he struggled to keep clear of the wall as he was drawn up. He was still some two hundred feet below the trio, and I could not tell whether he had observed them or not. The three creatures clung to the wall, motionless, as the scientist was drawn nearer them on his upward course.

When he was still a hundred feet away, I shouted at the top of my lungs, hoping to both frighten the creatures and distract their attention, and to inform the professor of their presence. The next moment I saw one of the creatures move over toward the professor's line of ascent. I called to Williams to pull faster, but I saw at the same time that it was impossible to haul Burlingham out of danger quickly enough. It appeared that the creature would grab him, and try to hold him. In that case it would develop into a tug of war, with the professor's life at stake and very likely to be snuffed out in the struggle even if we won. I jumped to my feet and gave what aid I could to prevent the creatures from winning. At my urging we began to haul in the rope faster, regardless of the fact that the man at the end was being dragged across sharp stones.

The expected jerk on the line did not come, but in a moment we heard the sharp report of a rifle, followed by a human shout from below. The shout came again and this time we understood it.

"Stop!" we heard Burlingham's voice.

Jumping back to the brink of the hole I looked down and saw the professor dangling at the end of the rope. Only two of the underground creatures were in sight, and they were moving rapidly downward. The immediate danger was past.

More slowly and cautiously we pulled the professor to the surface and helped him onto the solid ground again. He was cut and bruised and, as we could see, completely exhausted. We placed him on his back while General Lombardi bent over to question him and the rest of us crowded around.

"What happened?" demanded the general when Professor Burlingham opened his eyes after a moment.

"There was little to be seen at the depth I was able to reach," began the professor breathlessly. "The opening extends much further, probably to a distance measured in miles. However, I observed unusual strata formations, and collected some samples of earth and rocks which were loose. Unfortunately, I lost them when I had to defend myself against attack."

"But that's not what I want to know about," the general exclaimed impatiently. "Bother the strata! What happened when you encountered those three animals?"

"They seem to have a regular path for traveling up and down the wall," the professor said, "and I was not very far away from it. Two of them waited while the other came over to investigate me. I can hardly say I am grateful to you for the way I was hauled up the wall. In addition to bruising me up it made it almost impossible for me to use the rifle which I had. However, I managed to get it ready and at length the creature was within reaching distance of me. I saw that it intended to grab me and while I hated to take its life, I dared not risk falling into its powerful grasp. Accordingly, I fired point blank at it from a distance of only a few feet. The bullet struck it in the head and killed it instantly. The others, I think, realized that their companion had been killed and probably did not understand the manner. At any rate, they immediately resumed their descent, without bothering about the body of their fellow, which had caught on a jutting rock a few feet below me. I tried to make you understand that I wished to possess myself of the body and bring it to the surface, but I was too weak, I suppose. Someone must go down for it so that we may have the specimen. It will be invaluable."

"Invaluable or not," General Lombardi said in a determined manner, "no one shall go into that hole tonight. Tomorrow it will be different, for we shall have a force of soldiers on hand."

BURLINGHAM started to protest, but the general silenced him with upraised hand.

"You seem to know more about these animals than anyone else," he went on, addressing the professor, who had raised himself to a sitting posture. "How many of them do you suppose there are?"

"It is impossible to do more than guess, but the number certainly must be in the tens of thousands. The race could not have any very permanent and secure existence otherwise."

Lombardi whistled. "Your reasoning seems sound at that," he admitted. "And all of them are liable to come pouring out of their hole, I suppose?"

"Possibly."

"I understand you consider them intelligent and formidable opponents—more than so many gorillas, for example?"

A smile flickered across the professor's face.

"I consider them, with reason, to be more intelligent than human beings," he declared.

"So I was told. We'll pass that point, in which I am unable to agree with you. Have you any idea how they may be armed and what their disposition and intentions may be? Are we to slaughter them as wild and dangerous animals when they appear? Or can we deal with them on any terms? Surely no man was ever faced by such a problem." The last sentence was uttered in a tone of despair.

"It is indeed a serious problem, General Lombardi," Burlingham said solemnly. "I wish I could give you authoritative advice, but it is impossible. My own idea is that it would be exceedingly dangerous to permit any large number of the creatures to be at large. If we could negotiate with them, undoubtedly an arrangement of some sort could be made. But unfortunately there is no medium in which we can meet them. They can not even see us to learn from our attitudes that we are willing to be friendly. They are beings from a different world entirely, who have suddenly obtained access to our world. I think the result can only be a struggle for possession of our earth."

As the professor ceased, I hestitatingly advanced an idea that had occurred to me while he was speaking:

"Suppose the entire opening in the earth could be covered with wires charged with electricity at high voltage. That would forestall any wholesale slaughter, for they would quickly realize the danger of touching it. At the same time we might permit a few to come out, capture them, and use them as ambassadors to their fellows if we are able to establish a communication of ideas with them."

"I think the plan might work," admitted Burlingham.

"It could do no harm," the general decided. "At least the charged wires would serve as our first line of defense. I am going to return now to Scottsboro and I will order a detachment of the signal corps to start at once with the necessary equipment. Meantime I will send Colonel Durham by plane to take charge. I will instruct him to confer with you, Professor Burlingham, about any steps that are to be taken. I will also dispatch troops, including a machine-gun company, and they should arrive during the night. I will return tomorrow. In the meantime, of course, you can inform me of any developments by radio. You are my representative, Lieutenant Williams, until the arrival of Colonel Durham, who should be here within an hour. My only instructions for the present are that no one shall attempt to descend into this opening until tomorrow, when Colonel Durham will direct the recovery of the body which Professor Burlingham tells us

can be reached."

Having concluded, the general spun around on his heel briskly with a signal to his pilot and the pair walked to where their plane rested.

THE night was a busy one, a steady stream of soldiers pouring in on foot from Scottsboro. Colonel Durham had arrived before dark. He was a white-haired, very formal officer of the old school, and he was inclined to think that all three of our party were crazy and that General Lombardi had been affected by his contact with us. Nevertheless, he consulted with Professor Burlingham, obviously intending to carry out to the letter the instructions given him by the general. He was followed shortly by members of the Signal Corps of the Army, who were brought by plane and landed at our improvised field. At the professor's suggestion, they were put to work at once, making a protective fence around the point at which the subterranean creatures had been noticed to emerge. When this temporary fence was connected with two 440-volt storage batteries brought for the purpose we felt reasonably secure against a night attack. Arrangements were made to wire over the entire chasm the following day. A dynamo would then be put in operation and the whole system of wires could he charged to any tension which proved necessary.

That plan, however, was destined never to be carried out.

I went to sleep about midnight, and was awakened at the break of dawn by Burlingham. He was quite sore and stiff as a result of his narrow escape of the day before. Our surroundings had changed considerably overnight and there was now a considerable military force encamped around us. We sought out Colonel Durham, who was already up, and the Professor suggested that the body of the creature he had slain the previous day be brought to the surface immediately. He urged haste on the ground that an examination of its body might furnish information that would prove valuable in case of an encounter with the creatures in force, and also because of the possibility that the body might be carried to the underground cavern by its fellows at any time.

Colonel Durham assented, revealing his curiosity and a desire to see the body. The professor volunteered to make the descent and tie a rope around the creature's body but Colonel Durham rightly refused to permit this. Lieutenant Williams, who had followed us, came up at this moment and offered to go down himself. His superior consented and ordered Williams to make the descent at once.

The arrangements were quickly completed. A squad of soldiers was routed out to stand by the rope, and soon Williams was being lowered into the abyss at the same point where the professor had made his perilous descent. In addition to the rope tied around his chest, he carried the end of another rope which was fed out to him from the surface. At length his shout told that he had sighted the body of the professor's victim. Considerable maneuvering followed before at last he indicated his success in reaching it.

The slight tremors which had continued ever since the initial shock had been equally noticeable that morning, and I had also noticed a very slight noise like a distant grinding.

As the soldiers handling the two ropes rested momentarily, I became aware that the force of the tremors was greater than it had been. The vibration had increased gradually and we had been so absorbed that we had not perceived it. It seemed to me that the noise was likewise increasing. I saw Professor Burlingham standing a few paces from me and moved over to call his attention to what I had noticed. Before I could traverse the distance I felt the ground rock under me alarmingly. The professor fell to his knees, as did one of the soldiers. At the same moment

the most horrible conglomeration of noises from the earth's interior assailed us.

"Haul up that man!" The sharp command was uttered by Colonel Durham.

With the ground rocking violently under them the soldiers began hauling in both ropes rapidly, like sailors heaving on a line.

IT WAS a moment of the greatest tenseness and anxiety. Another distinct and forcible shock appeared imminent. All of us were in an extremely precarious position, but our danger was nothing compared to that of Lieutenant Williams, who faced a certain and horrible death unless we could get him to the surface before we were all thrown from our feet. I felt certain that the shock would come within a minute, as both the trembling of the earth and the noises beneath us were increasing steadily.

One soldier, near whom I was standing, called to me for help. Then I saw what I had not noticed in my excitement, that he and one companion were drawing up one of the lines alone. There were eight men at the other line, and another would only have been in the way, but the two lone soldiers were having quite a struggle with their burden. It dawned upon me that Williams must have fastened the rope around the body of the underworld creature in time and that it too was being drawn to the surface. I jumped to their aid and the rope began to come in faster under our combined efforts. It was very heavy, confirming my guess that it was attached to the body Williams had risked his life to obtain.

I heard a cheer and saw the Lieutenant's head appear at the surface. He was helped to safety, and then Professor Burlingham, who had seen the efforts of myself and my two companions, brought aid to us.

The creature's head appeared over the brink and then suddenly shot downward, as the rope, hurriedly and insecurely tide, slipped from its chest and came free in our hands. Those of us who had hold of the rope fell backwards, and at the same moment the earth seemed to rise up and strike us a mighty blow.

It was an hour later when I recovered consciousness, to find the professor bending over me.

I looked at the professor inquiringly and he swung his arm in a wide gesture. I looked, and it was a moment before I found my bearings. The great opening in the earth had completely disappeared.

"The first shock opened up a path to a different world," said Professor Burlingham softly, "and the second closed it forever. At least we have had the rare opportunity of a peep at an entirely different civilization and we have learned something from it. I hope that the demonstration that other beings, of intelligence surpassing ours, exist in the universe will give us a little humility."

"For myself, I will never deny the possibility of any conjecture, no matter how wild it seems," Williams said devoutly. I echoed his sentiment.

"As to those unhappy creatures of the nether world," concluded my eminent friend, "probably we shall never know how they have fared in this second quake. For my part I hope that their subterranean home has not been destroyed, as I fear it has, and that at some future date, when both we and they have grown in knowledge and wisdom, they may emerge to the surface and share our better world in peace and amity."

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AMONG NEXT ISSUE'S HEADLINERS

MARK OF THE METEOR by RAY CUMMINGS

She was the "Woman of the future"

The Blunderer

By L. SPRAGUE DE CAMP

A masquerade foul-up made methodical Marius Baum a lovable Joe—and then his troubles began!

MARIUS Baum looked at himself in the mirror with distaste. He often disliked himself—and never more than when he tried to "loosen up" or "be human" as his well-wishers were always urging he do.

The sight in the mirror would have repelled an even less self-critical man than Marius Baum. For his stocky form was encased in an emerald silk ballet-

suit that had once clothed a dancer who portrayed Prince Siegfried in *Swan Lake*.

From the waist dangled a "ray-gun" —actually a child's toy, a flashlight in the form of a pistol. A scarlet cape topped off the outfit. Out of this gaudery rose the head of Marius Baum—an owlish-looking head with a swarthy skin, a bush of tightly-curled black hair and a pair of horn-rimmed glasses. Marius winced.

Baum was dressed as the "man of the future" because Violet Rogers had told him she would go with him to the Hallowe'en party given by the engineers of the Laboratories only if he would go in costume. Much as he hated the idea of dressing up he had given in when confronted with this bald choice —no costume, no Violet.

His lip curled as he looked at the reflection. You cold fish, he thought. You stuffed shirt. You human slide-rule. You gargoyle.

However, since to stand sneering at one's own image is at best a tedious and unprofitable occupation Baum took off the fantastic cape, rolled it up, donned his overcoat and went out. On the front step of the house where he roomed he took a quick look up and down the street, then scuttled across the sidewalk and fairly leaped into his car.

A light drizzle was just trailing off into a mist. The slick black asphalt cast back colored reflections of the stop-lights. Baum drove slowly through the early October dusk, wishing he had worn only a slicker over his costume. The combination of ballet-suit and over-coat was uncomfortably warm but he did not have the brass to discard the latter.

ANORMALLY careful driver, he drove more meticulously than ever. If he incurred the least mishap it would be horribly embarrassing to have to explain to some stupid sparrow-cop why he was driving around the city in a suit of long green underwear.

He took a good look in the rear-view mirrors from time to time to see if by any chance he were being followed. Not that anybody had ever actually followed him as far as he knew—but he suspected that if They ever wanted to find out what the Laboratories were up to They might well start working on the Classified Projects editor. He had not shared this speculation with anybody else, partly from natural taciturnity and partly from fear of ridicule.

One trouble with him, he continued, morosely introspective, was that he saw other people's faults too clearly for them to like him, saw his own too clearly even to like himself. Like that man in Gilbert and Sullivan—

"A charitable action I can skill-fully dissect;
And interested motives I'm de-lighted to detect;
To everybody's prejudice I know a thing or two;
I can tell a woman's age in half a minute—and I do. But although I try to make myself as pleasant as I can, Yet everybody says I am a disagreeable man!
And I can't think why!"

* * * * *

"Vi!" he called.

"Coming." And there she was, look-ing enchanting in her concept of the "woman of the future." Her costume consisted mainly of those French sun-suits that covered only the few ultimate square inches and, on top of that, an old velvet opera-cloak with an ermine collar, such as were the height of swank in the early years of the century. In fact Violet's finding of this garment in a trunk in her attic had given her this loathsome idea in the first place.

"How cold is it?" she asked.

"Warm. Around sixty."

"Then this will be enough," she said,

enfolding herself in the opera-cape.

Baum ignored a taunt from Violet's younger brother about "Superman" and hurried the girl out into his automobile.

"How are you?" he asked gravely as they got under way.

"Fine. Where did you say this was being held?"

"At the Bradford." Then he relapsed into silence. While he was never a loquacious man the presence of Violet Rogers seemed to tie his tongue completely.

Maybe he ought to take up drinking. Alcohol was said to loosen up inhibited types like him. But not yet—not while he had the editorship. That was too responsible and confidential a job for him to let his tongue be loosened on any pretext.

Bump!

The car ahead of Baum had begun to make a left turn just as another car coming in the other direction, having slowed down as if to yield the right-of-way, started up again and sped across the intersection. The car ahead jammed on its brakes. So did Marius Baum—but not quite soon enough.

Now he was in for it. And if his garb would arouse comment when exposed to the shameful light of publicity, what about the almost non-existent one in which Violet was clad? He began to get out, feeling in his overcoat pocket for the wallet that held his driver's license—for the ballet-suit had no pockets. A man was getting out of the other car too.

"Pull over to the curb, you guys!" said the harsh voice of authority as a cop materialized out of the darkness and began unsnarling the traffic that had piled up around the two stalled automobiles.

BAUM got back into his car. So did the other driver and they moved their vehicles over to the nearest curb and got out again. Baum, looking at the front end of his machine, could see no damage except a small mark on the paint of his left front fender. Not even a dent.

The other driver was meanwhile examining the rear of his car. Presently he took a few steps towards Baum, saying, "No damage here."

"None here either," said Baum. "But just in case . . ." And he extended his wallet with the license showing through one of the little plastic compartments.

The other driver got out a small pad and pencil and copied down the data given therein. Then he tendered his license in turn for Baum to copy.

"What you got on, mister?" said the cop, who had been inspecting the cars himself.

Baum realized that he had left his overcoat unbuttoned because of the temperature and that his man-of-the-future costume was fully visible.

"I'm on my way to a costume party," he said weakly.

"Hm," said the cop. "These cars don't seem damaged none, do they?" And he moved away to direct the still-fouled traffic at the intersection.

As Baum looked up from copying the other driver's license be became aware that the other occupants of the strange automobile had also got out and were standing around him. He could see by the street-light overhead that they were all dressed exactly alike—very plainly, in dark double-breasted suits, white shirts and dark neckties.

Ominously silent, they moved in on him from all sides. The thought struck Baum that they might be a gang of criminals or spies. Would they dare molest him with a policeman directing traffic a few yards away? One good yell . . .

Even as he filled his lungs a bright light flashed in his eyes. His breath went out with a *whoosh*. In that fraction of a second all the starch had somehow gone out of him. He felt as weak as water, not physical weakness but a feebleness of will or spirit that left him limply receptive to any command or suggestion.

It was not long in coming. "Get in," said one of the men.

Like a man in a dream Marius Baum climbed into the strange car, which started up and whizzed away into the darkness. As they zipped around the next corner, Baum heard, faintly, the sound of a police-whistle. Dimly he apprehended that Violet, when she saw him get into the other automobile, must have climbed out of the one she was sitting in and accosted the policeman.

No further sounds followed them as they careened around other corners until Baum utterly lost track of where he was. Not that in his present state he much cared. He observed all these events with the sluggish detachment of a man sitting through a movie that bores him.

A long time later the car stopped. "Get out," said a voice, and Baum shambled up the front steps of an old brownstone house. They hustled him up a flight of stairs and into a room bare except for a large full-length mirror screwed to one wall.

One of the blue-suited men stepped up to the mirror and rapped sharply against the glass with a ring on one of his fingers, thus—

AND immediately the reflections in the mirror dissolved into mist so that they looked more like images on a television screen out of focus than true reflections.

"Come on," said one of the men and Baum walked with them through the mist.

He stepped into another room, quite different from the one he had left. Instead of a bare inclosure in a creaky old private house this looked like the reception-room of some public institution or industrial concern. On the linoleum-covered floor stood a plain desk and behind the desk sat a young man dressed (as Baum noted with a slight stir of surprise) much as he himself was, in a red outfit resembling a ballet-suit.

One of the men escorting Baum said something that sounded like, *"The Dimai Jich!"*

Whereupon the man at the desk called, "Pass five!"

There was a clank and a big gate of thick metal bars, like that into the safe-deposit vault of a bank, swung open. Baum had a glimpse of the man who swung it—another fellow in a union-suit, but this time, with a pistol of sorts dangling in a holster from his belt. He might have been another guest at the Engineers' Hallowe'en party who by some strange coincidence had decided to dress up in a costume of the same sort as that Baum wore.

The gate clanged shut behind them. They walked down the hall of a building which, judging by its looks, must be devoted to some technical enterprise—a hospital or laboratory building, perhaps.

PRESENTLY Baum's captors turned into a room that looked like a doctor's office. A man in black with a little white goatee on his chin sat behind a desk. Behind him a window opened onto landscaped grounds.

Through this window Baum caught a glimpse of something that stirred his interest despite the flaccid state of his volition. Beyond the hedges and lawns stood a tall iron fence and beyond the fence something vast and slaty-gray moved. It was an animal somewhat on the order of a sauropod dinosaur—a brontosaurus or diplodocus—and it was eating the long grass that grew beyond the fence.

"Here he is," said one of the escort.

The man at the desk looked at Baum, then opened his desk drawer and took out a sheet of paper with half-tone cuts and printing on it.

"Nonsense," said he of the beard. "He's no more like Dimai than I am. "You've made a mistake."

Baum's bound mind wondered vaguely at the fact that these people spoke common General American English. It would have been less surprising had

they spoken Russian or Martian—assuming such a language as Martian existed.

"But looks at his clothes!" said one of the men in the blue serge suits.

"Let's see your clothes, son," said the beard.

Baum obediently shucked his overcoat.

"Hm," said Whiskers. "This does seem to call for an explanation. Prisoner, how come you're wearing Antichthonese costume? Have you changed clothes with Dimai?"

"I didn't know it was Ant— well, that it was the kind of costume you say it is. I rented it for a fancy-dress party."

Goatee chuckled. "See? Now you'll have to start over. It's not likely you'll find him in his original suit when he's been gone as many hours as this. As for you, son, I reckon we owe you an apology."

A light flashed in Baum's face again and he heard the beard's voice saying sharply, "Wake up!"

Life seemed to flow back into him, and Baum realized that he had regained his will. "Now," he said belligerently, "maybe you'll explain . . ."

The man in black held up his hand. "Later. First I'll have to know a bit about you. McMichael, you stay here. The rest of you go about your business. Now, my young friend, suppose you tell us who you are?"

The biggest of the four men in the double-breasted suits settled himself into a chair while the others filed out.

"Why should I tell you?" said Baum in tones of cold defiance. "Who are you?"

The other man smiled. "We seem to be at an impasse. If you'll tell me who you think we are, maybe we can clear things up."

"Aren't you working for Uncle Larry?"

"Uncle Larry?" said the other, plainly puzzled.

"Yes. Lavrenti Beria."

"Oh, you mean the Commies?" The man in black opened his mouth and laughed loud and long. "No," he said when he got himself under control. "We aren't. In fact we're after Dimai because *he* is. Now will you tell us about yourself?"

"Well," said Baum, somewhat mollified, more puzzled than ever and still suspicious, "my name's Marius Baum, I'm a native-born American and I have a technical editorial job with the U. S. Government." He gave a few more details of his background, avoiding any mention of the confidential nature of his work.

He concluded, "Where am I then? In another dimension?"

His interlocutor winced. "You're a smart lad but don't use 'dimension' in that pseudo-scientific sense! Call it another continuum."

"All right, another continuum. On a planet that occupies the same space as ours, only in this other plane—"

"Not 'plane'—that's occultism. Continuum."

"All right, continuum, that goes around its sun at the same speed as ours."

"You're mostly right, except there's no exact correspondence between Antichthon and Earth. Antichthon is actually somewhat smaller than the Earth and takes a longer time to go round a larger star at a longer radius.

"I can't explain it to you now but it's like those formulae for the location of an electron—they only tell you where it's most likely to be. So the connections between Earth and Antichthon are valid even though they don't coincide literally. Actually Antichthon is in the same continuum as Earth but at the other end, where the universe curves back on itself.

"However, you pose a problem for us. You can't stay here, not having been invited through the usual channels, and we can't send you back knowing about us. Don't look scared—we're not going to bump you off. Antichthon adheres to a strict standard of justice. But . . .

"All I can think of is to destroy the memory of your visit to us. We don't much like to do that, since a man's memory is his most private possession. However . . ."

"If you're on the level," said Baum, "You could trust me not to give you away."

THE white eyebrows rose. "We can find out about that." He threw a switch on the teletalk system and said, "Send Guzman in to me." He turned back to Baum. "He'll examine you."

"Who's he? Psychologist?"

The man in black nodded.

"Mean I've got to lie on a sofa for a month telling him about every lustful thought I ever had?"

"No, nothing like that. You'll see. My name's Harris, by the way. I'm an administrator."

"Pleased to know you. I suppose you've got some Utopia here and don't want a lot of nogoodniks from Earth swarming in and spoiling it?"

Harris smiled. "Wait till Guzman—ah, here he is.

Baum met a small dark man who took him into another office and kept him working on tests much like aptitude tests for a couple of hours.

Then Guzman brought Baum back to Harris's office, saying, "Reliability index ninety seven point eight, one of the highest I ever tested. It indicates in fact that he's one of those fanatically punctual and truthful people who make themselves unpopular with their more easy-going friends by too much exactness."

Harris said, "Such being the case, I think we can trust you."

"Can't I visit your world? I'd like a look at that live dinosaur at least."

"Sorry. Rules, you know. You see, as you guessed, we're trying to run a kind of democratic scientific Utopia. And it's hard enough, even with specially picked immigrants, because brains and character aren't simple Mendelian hereditary qualities, though heredity does influence them. So different characters do crop up."

"If you let more in," said Baum, "you'd relieve a lot of conditions on Earth."

"For how long? You're wasting your resources at an appalling rate and increasing so fast it'll soon be standing room only. And at the same time you're planning another ideological war that may blow up the planet."

"It's not us who are planning it," interrupted Baum.

"I know but I'm speaking generally. If we let a lot of you in it'd mean we'd soon be in the same fix—while those left behind would merely breed that much faster and be no better off than they were."

"How long has this been going on?"

"About thirty years. A physicist named Tanezaki discovered the way through but like a smart boy he kept it to himself until he was ready to let in a few carefully chosen colonists from various nations. It just happens that the life on Antichthon—"

"Where'd you get that name?"

"Classical literature. The life of Antichthon is in about the equivalent of your Mesozoic Era of evolution, so there are no intelligent inhabitants to worry about. Now, before you go . . ."

"One more. Who's Dimai?"

"Franz Dimai, an Austrian Communist, only we didn't know it when we let him in. He ran out on us with the hope of blasting his way back in at the head of the forces of the so-called People's Democracies. Since he escaped in Antichthonion costume our men were looking for somebody dressed like that.

"It was a one-in-a-million coincidence that they happened to pick you up. You see even our super-psychologists miss once in a while." Harris grinned at Guzman. "As I was saying, we owe you for the inconvenience and if there's something we could do before you go back—money, for instance . . ."

Baum thought fast. "Can you confer immortality?"

"Sorry, not yet. Another decade maybe."

"Well then, can your—uh—super-psychologists change or improve a man's character? Without his having to spend a year on a couch?"

"Reckon they can. Why, d'you feel in need of improvement? I'd have said you had a pretty solid character as you are."

Baum said, "Yes, but— It may sound silly but I want love. I want to be lovable. As Mr. Guzman said I'm one of those rigid characters everybody respects but nobody likes much. I'd like to be loosened up so I'd be popular and attractive. To women, for instance."

"Ah! We'll see. José, can you make Mr. Baum popular and truly sought-after without lowering his reliability to the danger-point?"

At that moment the telephone rang. Harris picked up the handset, listened, and replaced it with a chuckle. "We needn't worry about Dimai any more. He's been liquidated as a deviationist. Seems he told his story to the bigshots, who decided the idea of another continuum was idealistic fascisto-bourgeois monopoly-capitalist imperialist propaganda and therefore couldn't be true. Well, José?"

Guzman brooded over the question for a few seconds and said, "I think so. The Bendix treatment should do it. It may lower his index a few tenths of a point but that means nothing to us. Will you come now, Mr. Baum?"

NINE months later (Earth time) the Antichthonian receptionist heard the code knock 3-2-3-1 on the other side of the portal. He threw the switch. As the mirror faded into a shimmer of lines of force, a dark chunky curly-haired man stepped through. The receptionist recognized Marius Baum. Not having been told to admit Baum, he instantly pushed an alarm button.

Five minutes later Baum, handcuffed to two armed guards, was marched into Harris's office. Harris looked glumly at his Earthly acquaintance.

"I'm sorry for you," he said. "Whatever possessed you to do such a thing? You knew we consider illegal entry a serious crime."

"When I explain," said Baum, "I don't think you'll mind. At least, not if you're that fussy about justice. To make a long story short I want you to change me back the way I was. Then destroy my memories of visiting here and send me back through your trick looking-glass. That way I can't hurt you because I won't even know about you."

"I'll be hornswoggled!" cried Harris. "What's happened?"

"If you'll let me sit—thanks. Guzman's treatments worked too well."

"How's that possible?"

"I went around smiling at strangers and kidding the girls and before I knew it Violet Rogers and I were married and I'd been promoted one grade and assigned a secretary of my own. Pretty little thing too—Heloise Fabry. I used to have lunch with her in that lousy government cafeteria and before I knew it she was madly in love with me, not even knowing I had one wife.

"What with one thing and another she high-pressured me into marrying her too. Not that I was really in love with her but I loved everybody too much to hurt her feelings by telling her I was already married.

"Well, maybe you can get away with bigamy if your job takes you traveling so you can raise your two or three families in different cities. But not in my set-up. I should have known what would happen—but without the old Baum rigidity I couldn't resist temptation. And sure enough Vi called the office when I was out and Heloise answered.

"By a funny coincidence that was also the day when my boss told me he was so sorry but my recent promotion was rescinded and I was to be taken off confidential work and given some routine paper-shuffling job.

"Seems I'd become so popular I'd attracted a swarm of friends who were al-

ways hanging around the office to gas or hauling me into a beer-parlor after work to get soaked. So much so that now the heads didn't consider me a good security risk any more. The way they put it, I had been an ideal man for the job but I'd grown—too indiscriminately friendly, they said.

"Next thing I was in jail for bigamy and out of my editorship. When the Lab found out about my arrest they suspended me on a suspicion of moral turpitude and if I'm convicted I'm automatically fired.

"What's more, Violet's applied for a divorce, so it looks as though I'd end up with no wives, since my marriage to Heloise was illegal, just living in sin. I'm out on bail, waiting for my trial.

"My lawyer says he could get me off if I'd done these acts in a state of amnesia, but that the prosecution's psychiatrists can spot a fake case of amnesia in no time. So the only way out is for you to give me some genuine amnesia."

"But," said Harris, "why have your personality changed?"

"So I won't get into trouble like this again! When you've lived with a personality for thirty years you know what to expect, but when a brand new one is thrust upon you, no matter how good it looks on paper, it's certainly apt to throw you."

"You wouldn't want Guzman to make just a slight adjustment?"

"No! I want the old Baum back! He had his faults but he didn't do badly by me. Never anything like this mess. And after this I'm going to look gift horses so carefully in the mouth I could be a veterinary dentist."

"Very well," sighed Harris. "I'm sorry it turned out this way. Who said there are only two tragedies in life—not to get what you want and to get what you want?"

"Wilde?" said Baum.

"I think so. How right he was!" said Harris and pressed the lever of the squawk-box to call Guzman.

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Four-Legged Hotfoot

By MACK REYNOLDS

Arthur was a pal (r-a-t) to the human race!

LIEUTENANT JOHNNY NORSEN threw down his cards in disgust. "That does it," he snapped, his angular face peevish. "From now on canasta is out as far as I'm concerned. Dick here sits next to me and draws six wild cards to my one. What good is a game that's nine-tenths luck?"

Dick Roland tossed his own cards to the tiny wardroom table and stifled a yawn. "It's pretty early in the cruise to begin swearing off games, Johnny."

Ensign Mart Bakr said listlessly, "Well, we might as well give up canasta. The skipper has already sworn off playing it, and Doc Thorndon wouldn't start

in the first place. How about going back to poker?"

Johnny Norsen grunted, "Poker's no good without stakes, and the regulations are strict against gambling in space."

"Craziest regulation in the books," Bakr snorted. "Hand me the game book off that shelf, Dick. Maybe we can find something new."

Dick Roland reached up above him and secured the copy of "1000 and 1 Popular Games Down Through the Ages" and tossed it to the spacruiser's third officer.

Bakr thumbed through it lackadaisically. "Pingpong," he said. "What's pingpong?"

Johnny Norsen said, "That's the one where you've got to have a table to bat a little ball back and forth. We don't have the room."

"Oh, yeah," Bakr mumbled. "Let's see, somebody marked gin rummy here. When did we play that?"

"Cruiser before last. Got fed up with it; irritated the skipper so bad he nearly came down with cafard."

"Ummmmm. High-Low-Jack-and the Game."

"That's another one where if you don't have stakes it's not interesting."

Mart Bakr kept thumbing through the pages. "They've got some of the damnedest games here. Ever hear of hotfoot?"

Nobody was interested enough to reply but he went on. "They played it back during the middle of the Twentieth. The guy who's playing finds somebody who's asleep or in some other manner unaware of what's going on. He puts a match in the side of the unsuspecting one's shoe and—"

"What's a match?" Norsen asked disinterestedly.

"An early form of cigarette lighter," Dick Roland told him. "They had a chemical preparation on the end of a small piece of wood. You rubbed the head against some hard object and it broke into flame."

The first officer snorted. "Sounds awfully complicated. How many times would one work before it was used up?"

"I don't know."

"Listen to this," Mart Bakr commanded. "This is what they considered a game back in the Twentieth. The player puts the match in the other's shoe and sets fire to it. When it burns down to the foot, the victim jumps up howling and trying to get his shoe off to ease the pain. It says here: 'This afforded considerable amusement to all spectators.'"

"Who in kert compiled that book?" Johnny Norsen asked. "Next thing they'll have a description of the Chinese Water Torture as a game."

Dick Roland got to his feet and stretched hugely. "The author was really reaching when he included that one," he said. "Anyway, I'm tired. I think I'll go in and chew the rag with Doc Thorndon awhile."

Mart Bakr tossed the book to the table. "Yeah, I'm on watch in half an hour anyway. Maybe I'll kill that much time reading."

Johnny Norsen complained bitterly. "Reading what? We've all read everything on the *New Taos* three times over."

Dick Roland grinned back at them over his shoulder as he worked his way through the tightly packed chairs in the wardroom and made his way to the door. "Why don't you go up to the skipper's quarters and give Mike Gurloff a hotfoot? That'd wake things up around here."

DOC THORNDON was lying on the bottom bunk in the ship's hospital. The room was about the size of a bedroom of a Pullman of the Twentieth Century. It had two bunks, a tiny folding table, a medicine chest built into the titanium alloy wall, a lavatory. The hospital also doubled as the doctor's quarters; if he had two patients at once, he had to leave his place and bunk with the third officer—but that was seldom.

He looked up from his book as the navigation officer entered. "Hello, Dick," he said easily. "Draw up a pillow and lie down." The doctor was a little, cheerful, roly-poly man, his cheeks still pink but his hair thinning and graying. He looked about forty-five—old for the Space Service.

Dick Roland hoisted himself into the top bunk, sprawled on his back and tucked his hands under his head and stared up at the ceiling.

"Game over?" the doctr asked casually.

"Uh huh."

"Who won?"

"I don't know. Forgot."

The doctor went back to his book but there was a trace of frown on his good-natured face.

After some minutes of silence, Dick Roland said, "You know, Doc, we're the two most worthless members of this crew."

Thorndon tucked a finger in the book to mark his place and considered that. "Oh, I don't know," he said. "Nobody does much on a spacruiser; not the way they did in the days of surface vessels back on Earth. You take the cook. Once they were mighty important—good cooks—but now what do they do? Ninety-nine per cent of their work is automatic. And take the signalmen. We have two aboard; but here we are on a patrol that will last a year, and there's hardly a possibility that we'll use any of our various methods of signaling until we get back to the solar system and the trip's practically over. The same thing applies to everyone else. Even Commander Gurloff hasn't enough to keep him busy an average of more than a half hour a day. Everything's automatic—everything."

"Uhhhhh," Dick Roland said, "but if and when we need them we need them bad, any of them. Suppose something went wrong with the automatic chef? The cook would have to take over."

Doc Thorndon shuddered.

"No, seriously, Doc. You and I are the least necessary members of the crew. As long as I've been on the *New Taos* I've only had to do any navigating once, and—nothing personal, of course—actually, what in the world good is a ship's doctor any more? What do you do except maybe give one of the men a peni-aspirin shot ever so often to keep him from having headaches for the next six months?"

"Each one of us has a use," the doctor protested, "and when we're needed, we're needed bad. Take, for instance the time the Kadauto-pilot was knocked out in that fight with the Kraden cruiser and you had to figure out a course back to the solar system."

"Yeah," Dick Roland snorted, "once in fifty years something like that might happen. What is it *you* do once every fifty years, Doc?"

Doc Thorndon scratched the end of his nose reflectively. "Oh, I don't know. It's pretty important to keep space cafard from hitting a ship, and the way boredom's growing, it looks as though it might become a problem. We should never have been ordered out on this patrol so soon after the last. The men didn't have time to rest."

It was Dick Roland's time to shudder.

AN ENLISTED man stuck his head in the door. "Doc," he asked, "you haven't seen the skipper around have you?"

"Not for more than an hour. Isn't he on the bridge?"

"No, sir. You didn't see him, did you Lieutenant?"

Dick Roland shook his head. "Not recently, what did you want him for, Spillane?"

"Wanted to report a funny looking animal aboard, Lieutenant. Saw him up forward a little while ago."

Both the doctor and the navigator came to their elbows. "A what?" Thorndon asked.

The messman demonstrated. "A little brown animal, about this long and maybe this high, Doc. Half a dozen of us

spotted him up in the crew's galley. Nobody'd ever seen one before, not even in a zoo."

Dick Roland swung around in the bunk and let his knees hang over the side. "What'd it look like, Spillane? Earth-type, Martian, Venusian—"

"It looked like an Earth animal, sir. Four legs, a head, eyes, nose, mouth. Yeah, it was an Earth-type all right. Kind of blinked at us when it saw us watching, and scampered off real quick."

Doctor Thorndon was scowling. He came to his feet. "Come along with me, Spillane. We'll see if we can locate it in the encyclopedia." He started for the corridor.

"Hey, wait for me, Doc," Roland called. "Imagine an animal being on board!"

On the way they passed a burly noncom gunner who was listlessly touching up a spotless space-rifle. "Hey, messman," he called, "what's this about some of you guys in the galley seeing an animal?"

"That's right," Spillane said, proud of the attention he was drawing, "we're going to check up on it now."

The noncom chuckled. "Animals he's seeing. Brother, let me tell you, you're coming down with the cafard, but bad."

Spillane looked anxiously at the doctor after they'd passed out of earshot of the gunner. "You don't think that's it, do you, Doc?"

Thorndon shook his head kindly. "Not if several of you saw it. "Don't let it worry you. Hallucinations don't appear in space cafard until the final stages. You haven't shown the early symptoms as yet."

They made their way into the wardroom, Spillane remaining near the door, uncomfortable at being in officers' country.

JOHNNY NORSEN looked up from the chess problem he was trying halfheartedly to solve. "What's up?" he asked, little interest in his voice.

Dick Roland motioned with his head at the enlisted man. "Spillane, here, and two or three others claim to have seen some small animal in the ship's galley."

"No kidding?"

"I'll be a makron," Mart Bakr put in. "What kind of animal?"

Doctor Thorndon had taken one volume from a long shelf that held similar ones. "None of them could identify it," he said, thumbing through the pages. "Ah, here." He took the book over to Spillane.

"Is this what you saw?" He indicated an illustration.

"Yeah, yeah," Spillane said happily. "That's it. What is it, Doc?"

Doctor Thorndon rubbed his nose with a forefinger and scowled. "It's a rat," he said. "You can go now, Spillane. Uh . . . just a moment. Tell the crew that I offer fifty credits reward for anyone who'll bring it to me alive."

"Fifty credits?" The messman was impressed. He scurried out of the room breathlessly.

"A rat?" Johnny Norsen muttered. "What in the world's a rat and what would it be doing on a ship?"

"Here it is," the doctor said. He read: "'Rat. Original habitat Earth. A large rodent belonging to the genus *Mus*. Commonly brown or black, sometimes with a grayish tinge, they vary in length from about seven to ten inches. Very prolific mammals, they produce from twenty to fifty young a year'—well, that isn't important in this case, unless they're two or more of them. Let's see—'Supposedly originating in China, they spread through Europe in the Middle Ages and still later to America by way of ship. Highly destructive of grains, foods, and soiled clothing, they are occasionally vicious enough to attack human beings. Their greatest menace is as disease carriers, the bubonic plague of the tropics being spread by them.'

"Well, that was in the old days," Thorndon mused. "Let's see, here we

are: 'Now extinct except for a few laboratory specimens, on Earth, a small number still exists in the wild state on Venus where it is believed they were taken inadvertently in the early space freighters.' "

"Hey, that's probably where we picked it up," Mart Bakr said. "Just before we took off from there."

"This is interesting, Doc," Johnny Norsen said, "but why'd you tell Spilane you'd give fifty credits for him?"

Doc Thorndon closed his book and looked up at the first officer. "He's worth it," he said. "The things are priceless back on Earth. In the early Twenty-second Century, in their zeal for exterminating the pest, people practically eliminated the species, which was unfortunate in a way because they're invaluable as laboratory animals. They're exceedingly like man, you know."

"Are you kidding?" Norsen asked.

"What's like a man," a new voice growled.

They looked up at the entrance of burly Commander Mike Gurloff. "And what's this I hear about a rat being on the ship, and what's a rat anyway?"

Doc Thorndon went over the matter briefly for the skipper.

"I'll lay you two to one, we picked him up on Venus, all right," Gurloff growled. "Doesn't make any difference, give the men something to do. What was this about it being like a man? I thought you said it was only ten inches long."

"They're omniverous, like man," Thorndon explained, "and very adaptable. They can eat anything and live in any climate that men can. An example is the fact that they were even able to adapt themselves to Venus."

"Unnnn?" Gurloff said. He'd lost interest already. "Well, probably one of the crew'll pick him up for you in short order." He walked over to the viewer and peered into it with ennui. "I'm getting to the point where I wouldn't mind if we ran into a Kraden ship; anything to break this monotony. I'd bet my left arm we'll all be down with cafard before the cruise is half over."

Mart Bakr said suddenly, "You know, I think I'll take a crack at catching that rat myself. What'd I bait a trap with if I made one, Doc?"

The doctor shrugged. "I think they're supposed to like cheese in particular," he said.

Johnny Norsen scratched the back of his head. "If you tuned a stun gun all the way down you could probably knock him over without killing him. I wonder where he's hanging out? Maybe in the galley stores in the Number Eight compartment."

"Listen," Gurloff growled at his first officer. "I'll bet every man in the crew who isn't on watch is down in the Number Eight compartment, trying to catch that rat. Don't you go down there with a stun gun. I'd lay you two to one you'd wind up blasting some enlisted man."

Norsen was disappointed, but he grinned amiably. "Okay, Skipper," he complied. "But fifty credits is fifty credits."

DURING the next two or three months the rat was spotted half a dozen times, but no one claimed the fifty credits. A score of methods were devised to root the rodent out, but none of them was successful. Stun guns, traps, knock-out drops in food that should have been considered delectable by a rat—none of them worked.

It was Ensign Mart Bakr who christened him Arthur; and it was Taylor—a jetman second class, who played a guitar and was considered the ship's wit—who began the composition of "The Saga of Arthur, the Space Rat." He left the last stanza free, explaining that it was reserved for Arthur's fate.

It was suggested once or twice that Arthur be made ship's mascot if and when captured. But to have a rat for the ship's mascot you first have to catch the rat, and Arthur wasn't having any.

In the third month after Arthur had

first been spotted, enthusiasm about his presence on the *New Taos* had died considerably. Except for a few die-hards who continued to dream up new plans for his capture, the crew decided that the elusive rat had found some hiding place which was practically foolproof. They gave up, fifty credits or no fifty credits.

The next chapter in the career of Arthur began in the officers' mess during the fourth month after his discovery.

They were at dessert when Mart Bakr asked listlessly, "Doc, how does it feel to have a case of cafard, a real bang up case?"

The doctor finished chewing his last bite before answering, but his eyes had narrowed imperceptibly. "Never had it, so I wouldn't know. Not so good, though."

Bakr said, "Sometimes I think I'd like to get a case, just to have something different to do."

Johnny Norsen said, "That reminds me of the guy in the weather station on Phobos. It was so monotonous and drab, and so irritatingly quiet that one day he reached down and broke his arm, just to hear it snap."

"All right, knock it off," Gurloff growled. "It's getting to the point on this ship where the only topic of conversation is space cafard, space cafard, space cafard. You'd think the ship was riddled with it. Actually we haven't had a case for . . . for the past six cruises. Since Doc Thorndon came aboard, as a matter of fact."

"Ummmm," the doc said, reaching for a toothpick. "I've been lucky."

"I still wonder how it'd feel," Bakr said morosely. "Anything'd be better than this "

"Don't be so sure," the doctor said softly. "For one thing, you'd never want to hit space again. You'd never be able to drag yourself onto a spacecraft, never be able to stand free fall, never—"

"You mean that's bad?" Johnny Norsen grinned.

There was a knock at the door and the head of a crew member cautiously made itself evident.

"Well, Spillane?" Mike Gurloff growled.

"Wanted to see the doctor, sir," Spillane explained. "About the rat," he added.

"What about the rat?" Doc Thorndon asked, not showing much interest. "Somebody spot Arthur again? Where? What was he doing?"

"He was running down the corridor, Doc. Not running, exactly . . . kind of dancing."

Doc Thorndon came to his feet suddenly, spilling his cup of coffee. "What!"

"He was dancing, like, Doc," the messman said in surprise. "Real funny. Taylor and me almost caught the little makron."

"Excuse me, gentlemen," Thorndon said tightly. He dropped his napkin to the table and brushed his way hurriedly from the room, and headed for the ship's library.

"What's wrong with the doc?" Bakr asked. "He looks like he's seen a ghost."

GURLOFF grunted. "Acts like he's got cafard himself.

Dick Roland ran his tongue over suddenly dry lips. "Bubonic plague," he said.

They all looked at him.

"What was that?" Norsen asked, a scowl on his homely face.

"I was reading up on rats the other day. They carry bubonic plague. When they have it themselves, they act queer, sometimes they dance."

Commander Gurloff came to his feet suddenly and made his way down the corridor after Thorndon, the rest followed him.

Thorndon was flipping through the pages of a volume of the "Encyclopedia Galactica"; he found his page and hurriedly traced a finger down a column. He didn't hear the others come in be-

hind him until Gurloff growled, "Well, what is it, Doctor?"

Doc Thorndon didn't look up, but he read aloud. " 'Bubonic Plague, also called the Black Death from the dark buboes or swelling which accompany it. In the past the disease cost the deaths of millions particularly in the Middle Ages. Caused by the *Bacillus pestis* which is transmitted by the rat-fly, its symptoms include vomiting, diarrhea, hemorrhages, swelling of joints and discoloration of the skin. The disease lasts from one to thirty days and is usually fatal. It has been completely unknown on Earth since the disappearance of the rat in the Twenty-second Century but cases have been reported periodically on Venus in the past few centuries. The vaccine is always effective.' "

Gurloff growled, "What in kert does it mean, Thorndon? Is there any chance—"

Doc Thorndon's face was wan. "If that elusive rat has bubonic plague, Commander, I—I—"

Gurloff snapped. "What if he has? We'll just have to give the whole crew shots for—"

A muscle twitched in the doctr's face. "Captain, there hasn't been bubonic plague on Earth since the Twenty-second Century. I haven't any vaccine."

There was a long pregnant silence.

Finally Mike Gurloff said softly, "What will we have to do, Doc?"

Doc Thorndon ran his eyes from one to the other of them, to Johnny Norsen, to Mark Bakr, to Dick Roland, finally back to the Captain. "We've *got* to destroy that animal." He came to his feet. "How much longer is the cruise to last, skipper?"

Mike Gurloff ran a weary hand over his bullet head. "About four months; we're on our way home now."

Doc Thorndon said, "If you ever expect to see it again, find Arthur. We may all be dead before the *New Taos* gets back to Terra; but even if we aren't we'd never see home until that rat is dead."

Gurloff growled, "What do you mean by that?"

"I mean that there hasn't been any bubonic plague on earth for centuries, and the *New Taos* most certainly wouldn't be allowed to land until—"

"Holy Jumping Wodo," Mart Bakr blurted, "this gets serious!"

Gurloff shot his eyes around at his three officers. "Roland," he snapped, "I have considerable confidence in you. You're in charge of Operation Arthur. Requisition any equipment or men you need. Get *that rat!*"

"Yes, sir!"

OPERATING with considerable assistance from Doctor Thorndon, Lieutenant Dick Roland went about Operation Arthur with desperate thoroughness.

Every man in the crew was armed with a stun gun. Orders were to shoot on sight. Arthur was no longer wanted for the laboratories on earth, or for a ship's mascot. Arthur was Public Enemy Number One and he was wanted dead.

All crew members were issued clothing which could be tied tightly about the cuffs and even at the collar—protection, it was hoped, against the rat-fly and its deadly bacillus. Disinfectant was spread about the ship with abandon.

The search of the *New Taos* was taken over by a carefully selected crew of twenty—half the ship's complement. Every square inch was explored. Roland and his men progressed from one compartment to another, searching each room with a care that would have made impossible the hiding of a cockroach.

After each compartment was searched, its spacetight doors were locked, nor were they allowed open again until there were several other *safe* compartments between it and the balance of the unsearched ship.

Operation Arthur went on slowly,

ruthlessly, carefully. It began in the nose of the ship, on the bridge, and combed back toward the stern.

The work went on with the full co-operation and sympathy of the entire ship's company. Gambling was taboo in space but it was known that there was a pool among the men on just when Arthur would bite the dust. The ship's clerk even mimeographed a bulletin on the progress of the search. Interest reached a peak.

Finally, one day, Dick Roland, attired in the uniform of the search, cuffs tied tight, stun gun at his belt, entered the wardroom and snapped Commander Mike Gurloff a salute.

"Eh?" the Commander grunted. "Got him, huh? Where was he, Dick? Bet you two to one it was in some food storage—"

Dick Roland moistened his lips. "Sir, we searched every compartment in the ship—"

"I know you did, son. Fantastic, the thoroughness of it all. Unnecessary to go into detail. Where in kert was the little makron?"

"We didn't find him, sir."

Commander Mike Gurloff came to his feet like an enraged bull. "What!"

Dick Roland said hurriedly. "Sir, I have one last plan that can't fail."

The skipper's face was a dark red. He snapped, "Very well, lieutenant. This is taking ridiculously long—get on with it."

Roland hesitated. Then, "Sir. My plan was to saturate the ship with chlorine gas."

"What!"

"Yes, sir. The whole ship, every compartment, every room, every nook and cranny, with chlorine gas."

Mart Bakr snorted. "It isn't bad enough that we're threatened with first space cafard and then bubonic plague, Dick wants to gas us."

The navigator pushed his point hurriedly. "Sir, the whole crew can be put into spacesuits and remain in them for three hours. In that time we can fill the ship with gas. Wodo knows where Arthur has managed to hide himself, but wherever it is, the gas will get him. After three hours, we can blow the ship clean with the ventilating system and be safe to discard the spacesuits."

Mike Gurloff stared at him for a long moment.

Doctor Thorndon spoke up. "It sounds like a reasonable plan to me, Captain."

"All right," Gurloff growled finally. "But when we get back to Earth I don't want this to get out, understand. We'd be the laughing stock of the fleet if it was known to what exent we went to kill an animal no bigger than—than—"

"Arthur," Johnny Norsen supplied. "The last rat to ever travel aboard a ship, and his ancestors are probably proud of him."

Commander Mike Gurloff glared at his first officer.

SO THEY donned their spacesuits, those men of the intrepid Solar System Space Service, and they deluged their ship with the deadly green gas. They permeated it. They let it soak into every corner and crevice for three full hours. Then they blew it clear.

When they climbed from their suits, officers and men, they looked sheepishly at each other. It had been a long fight, and they had won, but somehow they weren't proud of their victory. They knew that somewhere in his remote hiding place, Arthur was dead, but they found little satisfaction in the fact. It was as though a respected adversary had been conquered, and conquered by superior weight of numbers, by trickery, by double-dealing, not by honest warfare.

A toast was drunk to Arthur's death in the officers' wardroom. And in the crew's quarters, a tractorpedo was tapped for some grain alcohol and a mess of jungle juice was brewed. All listened respectfully when Taylor sang the last stanza of "The Saga of Arthur the Space Rat."

Which should be the end of this story

—but it isn't.

With the passing of Arthur, the ship drifted back into its routine and in a week's time, except for occasional nostalgic conversations about Operation Arthur, the space rat was forgotten. Lethargy was again the word and the monotony of space travel flung its drab cloak once again over the *New Taos*.

Over the mess table one night (night in that it was the third meal of a twenty-four-hour period, and the clock registered 1800 hours) Gurloff rapped suddenly, "What shape's the crew in, Doctor?"

Thorndon looked up from his food and appeared thoughtful. "A couple more of the men were in today with early symptoms of cafard, Captain."

Mike Gurloff grunted. "We've only a month to go. You'd think the prospect of getting home would hold them."

The doctr said earnestly, "Captain, when we do get back I think your report should contain a particularly strong comment upon the advisability of sending men out on patrols without a substantial rest period between. Perhaps I should have said, when *and if* we get home."

"What do you mean by that?" Gurloff growled.

"Cafard is a mental sickness, not a disease. This monotony, this boredom, has affected us all. I'm afraid that in such a state it might be contagious. If one man goes berserk, the whole ship's company might follow."

The commander snorted in disgust. "You're overstating it. Perhaps half a dozen of the men are on the verge of—"

The doctor raised a plump hand and interrupted softly, "That tic in your eye, Commander, is a symptom. You'd better drop into the hospital for a few minutes after your next watch. There isn't too much we can do to stave off space cafard, but you'd better take what treatment the ship affords."

Mike Gurloff stared at him, first angrily, but his belligerence melted. He got up from the table slowly, like a tired old man, and left the room.

Mart Bakr twisted a bread roll to crumbs nervously. "This is piling up," he complained.

A sudden road emanated from the depths of the ship, and those remaining in the mess hall scrambled to their feet.

"What in kert goes on?" Johnny Norsen snapped. "What're the makrons shouting?" He make his way hurriedly toward the door followed by Bakr and Roland.

They could make it out finally, "Arthur. *Arthur!*"

"Holy Wodo, they've gone batty," Bakr snapped, his eyes wide. "What're they—"

Spillane trampled up the corridor, his face flushed with excitement. "It's Arthur. They saw Arthur again down in the jetroom. He's still alive! Arthur's still alive!"

IT WAS all-out warfare then. Before, the campaign against Arthur had been pursued coldly, carefully and passionlessly. The rat was a potential danger, a threat to the whole ship, and he was ruthlessly to be destroyed. If anything, there was considerable sympathy for the rodent.

Now it was different. An emotional crisis seemed to seize upon every man aboard. Everyone's time, from captain to messman, everyone's interest, was settled on the killing of Arthur. Groups, pairs, solitary hunters, roamed the ship at all hours, armed to the teeth and seeking, red-eyed, the elusive rat.

It was beyond humor now. They were nearing Earth and they needed desperately to land, to escape the confinement in the tiny spaces of the spacruiser. They needed to see wives, sweethearts, families; to get drunk, to gamble, to see the sky above them, to swim in water, to hike over the countryside. The very thought of being confined indefinitely under quarantine against bubonic plague, drove them to frenzy.

Arthur was spotted thrice in the first week, and escaped desperately each time, the roars of the men behind him.

He fell the second week of the wild hunt for him. Knocked down by a half dozen stun guns when he ventured into an ambush in compartment eight, he was quickly dashed to the ship's incinerator. The men who had approached and handled him were rushed in turn to the hospital and all efforts made to disinfect them.

Somehow, it didn't seem real. It didn't seem possible that Arthur could be dead. Like his legendary enemy, the cat, his lives had seemed endless.

They put into New Albuquerque not long afterward.

DOC THORNDON was lying in the bottom bunk in the ship's hospital just as they were coming in for the landing.

He looked up from his book as Dick Roland entered.

"Hello, Dick," he said easily. "Draw up a pillow and lie down."

The navigator hoisted himself into the top bunk, sprawled out on his back and tucked his hands under his head.

"I figured out where Arthur was hidden," he said casually.

"Oh? I thought you might. How?"

"Various things, mostly by remembering some of the things that've been said during this cruise."

There was interest in the doctor's voice now. "Such as?"

"Well, for one thing, the skipper saying there hadn't been a case of space cafard on board this ship since you were appointed ship's doctor. Then I remembered all the information you had about rats and bubonic plague; you'd come up with things like the fact that they liked cheese but that information wasn't in the 'Encyclopedia Galactica.' That seemed a bit strange. Another thing seemed off, too. I studied up on bubonic plague and quite a few things were different than they should have been."

"So then I remembered another conversation. It was Mart Bakr telling us about a game they used to play in the Twentieth Century. It was called a hotfoot. It came to me, Doc, that that's what this ship's got, a *mental* hotfoot. We were shocked out of our potential space cafard by the threat of bubonic plague."

There was a long silence between them. Finally Roland said, "You must have got a kick out of those acts you put on. . . . Where'd you have him hid, Doc?"

"In the bottom drawer of the medicine kit mostly. In my coat pocket during the gassing." Thorndon added wistfully, "I had Arthur pretty well trained. You should have seen him dance, Dick. I found him myself there on Venus; hated to sacrifice him."

He sighed deeply. "I wonder how in kert I'm going to keep this damn crew from getting cafard next time."

●

Man-Made Satellite

INTERPLANETARY ideas, once discussed only in stf magazines, are invading respectable scientific circles with bewildering rapidity. The U.S. Army, in the person of Dr. Wernher von Braun, rocket expert, is giving serious thought to a doughnut-shaped satellite floating in an orbit around the earth, 1075 miles up. Instead of a hole in the doughnut, there will be a hub containing a power station activated by solar heat. Living quarters for the crew will be in the big outer rim.

Such a satellite, able to fire atomic missiles at any spot on the earth as the planet revolves, will command the world militarily. It will also serve as a refueling station for trips to the outer planets.

Dr. von Braun believes we have now reached the technical stage to carry the parts out into space via rocket and assemble the satellite there. If the army brass hats are lending an ear it can't be far away.

ADAPTATION

Faced by a serious situation, Colonel Day learns the answer to the question: "What shall it profit a man. . . ."

A SMALL man limped in through the door from the reception room. For a moment he stood in the doorway as if overwhelmed by the thickness of the rug on the floor, by the intricate design of the plastic desk, by the battery of telephones on it, perhaps by the determined cheerfulness of the office, like that of a reception room in a mortuary. He was carrying a brief case but he was so thin, so emaciated, that he seemed hardly to have the strength to lift it.

By ROBERT MOORE WILLIAMS

He raised his eyes to the big man sitting quietly behind the desk and moved forward.

No food card, Colonel Day thought offhand. I can spot 'em a mile.

"He insisted on seeing you, sir," Jennie apologized from the door. "He said he just had to see one of the big men in Food Controls."

Her lips twisted up at the corners as she spoke, a movement which Colonel Day noted, as he noted everything that happened within range of his alert eyes. She doesn't think I'm so big, he thought. She thinks I'm lower than a rat.

She was saying: "His name is Dr. Schwartz. Dr. Schwartz, this is Colonel Day, of Food Controls."

The title of colonel had nothing to do with the army. It was a rank adopted by the Organization.

"It is a pleasure to meet you, Colonel Day." Schwartz said it as if he meant it. There was about him a courtliness that belonged to an older generation, to a time when manners were considered important.

"Okay, you've met me," the colonel said. "What can I do for you?"

The colonel was not impressed. He did not intend to spend any more time with this derelict who had wandered in off the street than was necessary, and this little time was being spent in an effort to impress Jennie, his secretary.

Puritanical, Jennie was. Talked about rings when he talked about things. Really, he often thought Jennie didn't belong in the modern world of 2019. He often wondered why he bothered with her, when there were other women who would be more impressed by him personally and by his knack of being able to provide food cards.

But he thought he understood why she bothered with him. If she didn't, he might fire her. In that case, he could report her lack of cooperation to Job Controls, which would report back through proper channels to Food Controls, and next Thursday, when she came to her Food Controls office for her card, there would not be a card waiting for her.

The organization has its methods of securing cooperation, Colonel Day thought. If you quit your job without proper permission, you lost your food card, and if you lost your food card—Well even the garbage pails had locks on them in New York City in the year 2019, although there was hardly enough in them to justify collection costs, let alone locking them. The locks were Mr. Big's idea. When Mr. Big had an idea, everybody in the Organization had the same idea—or else.

"Sit down," the colonel said.

SCHWARTZ sat down in the chair beside the desk and looked expectantly at him. Jennie remained in the office. She had left the door to the reception room open a crack so she could see if anybody came in.

"What can I do for you?" the colonel asked again.

"Colonel Day, I understand you are the top man in Food Controls in this city?"

"Well, maybe not that big," Day answered modestly.

"I understand, also, that the food supply is very short, and that this country is facing a crisis—"

"You understand right!" Day spoke, then wondered if he had been too emphatic. However, it was part of his job to be emphatic, for the benefit of newspaper guys and radio reporters and telecast men, for visiting dignitaries, and for anybody else who would stand still long enough to listen. "We're facing a first-class crisis—" Day went into his patter. He had said the words so often that they rolled out without conscious thought on his part. "Food is in short supply. In spite of advanced agriculture and tank growing methods, we are simply not able to produce enough to give everybody all he wants. Waste must be completely eliminated and the most

rigid rationing must be co[illegible]ued. Our problem is very grave—"

Schwartz leaned forward across the desk. "I have solved that problem for you," he said with a smile.

The smile made his wizened, hungry face almost beautiful. The colonel was astonished. It was the strangest smile he had ever seen in his life, perhaps it was the only real smile he had ever seen, the smile of a man who has spent his life working not for himself but for others, one who had risen above self, who wants nothing for himself, except to know how best he may serve his fellow men.

This was the ideal to which the Organization did lip service but nothing more. The smile made the colonel uncomfortable. He twisted uneasily in his padded chair.

"I have perfected a process of artificial photosynthesis," Schwartz continued. "It has been the work of my life. It's all here, both formulae and diagrams." He pointed to the bulging brief case and the smile came again. A bright radiance seemed to glorify the wizened face.

It got so quiet in the office the colonel could hear his own heart beating. Schwartz looked at him, and glowed. Jennie looked at him, and glowed. Both seemed to feel that something important had happened.

Day kept his face purposely blank. "Photosynthesis?" he said. He was stalling for time, acting as if he did not understand.

The bright radiance of his smile lighted Schwartz's face again. "Photosynthesis, if I may refresh your memory, sir, is that process by which carbohydrates are manufactured from carbon dioxide and water through the agency of chlorophyll cells and light. Each leaf is a natural factory, sir, each blade of grass, each green thing that grows. For generations, efforts have been made to duplicate this process. Have you thought what this means, Colonel?"

Day sat silent.

"It means that no one on earth will ever be hungry again," Schwartz said. His voice was resonant in that silent room, he sounded like the angel Gabriel announcing that the human race was again fit to enter Eden. Desert ranging Arabs dreamed of heaven as a great oasis, with plenty of water, cool shade, and great groves of date palms. In the year 2019 any man, woman, or child in America dreamed of heaven simply as a place where he had enough to eat.

In that cool, pleasant, air-conditioned office, Colonel Day began to sweat.

The Organization had been scared that this guy, or somebody like him, would come along. Now he had come.

He's sitting here at my desk, tossing right into my lap the dizziest problem any man ever had to face, the colonel thought.

It did not occur to him to doubt Schwartz. The man looked honest, he talked honestly, without boasting or bragging.

He said, "I have completed a process of artificial photosynthesis."

Just like that he said it. You couldn't doubt it. Nor could you doubt that this was the biggest discovery ever made on earth, fire, the wheel, and the atom bomb not excepted.

A philosopher named Malthus once said, in effect, that man runs an eternal race with his belly, that all animals, including the human, tend to propagate faster than their food supply increases, that unless their numbers are held down by war, disease, and the depredations of other animals, they outstrip their food supply, with the result that somebody starves.

America had reached this point in 1980, Colonel Day thought. The books say it. Everybody believes it. The Organization swears it is gospel truth. Hell on wheels, I've told that story so often I believe it myself! The colonel twisted in his chair.

The truth was—well, the truth was

that this little guy with the astonishing smile was threatening to throw a monkey wrench into the smoothest working piece of political chicanery ever devised. Sure, he had something big, something the world wanted and needed, something that would make food as cheap as air and water, something that would solve the problems of the hungry world.

Inside the colonel a voice whispered urgently *Back him, Colonel,* it said. *Get in behind him and push. You've got the know-how, you can steer this guy right. You can make yourself a hero.*

Yeah, a dead hero, Day thought. If you doublecross the Organization, you know what happens. The colonel wiped sweat from his face.

Standing just inside the door, Jennie had almost stopped breathing. He had forgotten her. Now she spoke.

"Eddie, did you hear what he said?" Her voice vibrated. Eddie, he thought. That's the first time she ever called me Eddie. "Eddie," she continued, "when they get this process working on a large scale, everybody will have enough to eat! Nobody will be hungry any more!" The tone of her voice said that this would be heaven.

Sure, she had her food card, but there were some who didn't. Too many. Give us this day our daily bread.

Schwartz beamed. "The young lady is exactly right," he said.

"Uh—" the colonel choked. "What are you going to do with your process?"

The glow on Schwartz's face grew brighter. "I plan to give it as a gift to all peoples," he said. Not just to Americans. To Europeans, to Asians. To everybody!

DAY didn't say anything. Here was a man who had something that in a free market—which, of course, didn't exist—was worth all the billions of dollars he might ask for it. He could take a penny from the pocket of every man on earth. He was planning to give his discovery, to ask nothing for it. The colonel needed time to think. Mostly he needed time to get used to this kind of philanthropy.

"Some things are worth giving away," Schwartz said.

"But surely you want something for yourself," the colonel suggested.

"Certainly, I will take something for myself," Schwartz said.

"Oh." The colonel felt a little better. This, he understood. Something for you, something for me. That was the way the world ran. Schwartz wanted something. There was something he would take, just like everybody else. "Presuming it passes the necessary tests, what price are you considering asking?"

This would be important information to pass on up the line. The Organization would want to know. Mr. Big would want to know not only the price but complete details. Decisions would have to be made at a high level. Did the Organization want this process? Could they use it? If they didn't want it, what would they do with a little guy named Schwartz?

"Price?" Schwartz looked blank. "There is no price, sir. I said I intended it as a free gift to all peoples."

"But you said you would take something for yourself."

"Of course," Schwartz answered, as if now he understood what was on the colonel's mind. "So I will. What I will take is the good feeling inside of me that comes from helping others." He tapped his chest. "The good feeling here." The glowing look remained on his face.

The colonel leaned back in his chair. In his way, he was a very intelligent man. Otherwise he would never have risen to the position he now occupied. He was intelligent enough to know that here and now he was face to face with one of the great souls of this earth, with one of the saints who occasionally appear among sinners, with one of those rare specimens of genius who walk this world but live in some other world where the sky is always bright and the hills are always green, where the earth

always gives forth its produce and men are sometimes better than they are.

When Schwartz tapped his chest and said that what he wanted was "the good feeling here," he had expressed a profound truth which only great souls know, that the real reward we get is either inside of us—or it does not exist at all.

What will be my reward? the colonel thought. He was uncomfortable. He was still trying to think when Jennie opened the door and went into the reception room. His eye followed her as she left, then came back to Schwartz's face. Hastily he looked away. This glowing countenance he could not face. He picked up a pencil from his desk. The door opened again and Jennie entered. The colonel looked up at her and froze.

She had her hands in the air, and her face was paper white. Two men followed her into the colonel's office, and one made sure that the door was closed. Both carried .22 caliber Audel pistols, those vicious little guns that let go twenty shots with one pressing of the trigger, each little explosive pellet packing enough wallop to blow a fist-sized hole in a man's body.

"Get your hands up, you!" The guns covered the colonel. They ignored Schwartz at the desk. One man remained in front of the closed door. The other moved forward.

Day raised his hands. He didn't hurry but he wasn't slow, either. Too many times he had seen the results of an Audel pistol to take any chances with one of them.

Schwartz sat there looking at the guns as if he didn't understand what they were. Were they toys? What did they do?

It struck Day that Schwartz had probably never seen a gun before. Weapons were strictly forbidden to ordinary citizens, even rifles and shotguns. Orders of Mr. Big, who didn't want any spare guns around where somebody might pick up one and draw a bead on him.

Yes, the constitution says that ". . . the right of the citizens to own and bear arms shall not be abridged." The Organization had made one small change. By definition, anybody found with a gun in his possession was automatically not a citizen.

The instant the colonel had seen these two men, their thin faces, their gaunt bodies, and the guns, he knew what they were. Rebels! Outcasts. Men who did not hold food cards, pariahs, noncooperators who were the deadliest enemies of the Organization. Every police officer was authorized to shoot a rebel on sight, every citizen was forbidden to give them shelter or protection, no doctor was allowed to treat them, no cemetery was permitted to receive their bodies after death.

Deep in his heart, the colonel had never understood how they managed to survive. They had been hunted for years, like so many mad dogs; but in spite of all who were killed, they continued to increase in number, as if every man in his secret heart was a rebel. They had caused every member of the Organization many uneasy moments. They had assassinated captains, majors, even a few colonels, and they had tried, on two separate occasions, to kill Mr. Big himself.

About the last person the colonel expected to see in his office was a rebel. Why had they come here? What did they want?

Schwartz stared at them. "Jon! Edward!" His voice was scolding like that of an indulgent father reproving an errant child. "What is the meaning of this?"

Jon was the tall one. Edward was the one with the round face that should have beamed with good humor only it was too gaunt to beam. Jon was the leader. The gun in his hand covered the colonel but he spoke, apologetically, to Schwartz.

"We came as soon as we learned where you had gone, sir. You are mak-

ing a mistake, Dr. Schwartz. We came to save you, if we can."

"I think it is you who are making the mistake, Jon," Schwartz answered. "Colonel Day is a big man in Food Controls. I brought my process to him so he could pass it along to his superiors, for testing, and after the tests are successful, so the process can have nation-wide distribution immediately. We have to work through an established organization, Jon. The crisis is immediate. We must take all possible measures." It was apparently an old argument between them, one which Schwartz had solved by slipping off to deliver his process to what he thought were the proper authorities.

JON nodded. "I know that is what you think, sir, but the truth is otherwise." His voice was gentle.

Schwartz shook his head. "I don't see—"

"Well, I do," Jon said. He looked at Day. There was no approval in his gaze. "What you don't know is that the colonel, and every man in the Organization, is a crook."

"Sir!" the colonel said, his voice hot.

"Exactly," Jon said. "The Organization controls foods in this country, and it uses every medium of communication —radio, television, magazines, and the newspapers—to tell everyone that food is in short supply. Well, food is in short supply, but that shortage is artificially created."

The colonel said nothing.

"I know you claim that is true, but—" Schwartz began.

"If you give him your process, do you know what will happen?" Jon asked.

"Everybody will have enough—" Schwartz was playing that record again.

Jon knew another record. "So you think everybody will have enough? Your process will be taken over, ostensibly for 'testing.' They'll kick it around for a year or two while they make up their minds what it is and how it can best be used to their advantage. When they decide, they'll take it over and use it for their own ends, and you, sir, will be found floating in the river some morning." His eyes flashed as he spoke. Schwartz goggled at him.

Across the desk, Jon made a gesture, the snick of a finger across his throat. "That's what you will get from Colonel Day, sir, and make no mistake about it."

Sitting in his chair, the colonel wished he dared take his hands down to wipe the sweat from his face. He also wished there was some way to wipe the sweat, or something worse than sweat, from his soul. He had the dazed impression that this rebel had been reading his mind. He saw now that somehow or other the Organization had failed to keep its secrets.

Jennie's eyes were on his face. There was disgust in them, as if she had seen something loathsome. The colonel made a little gesture with his raised hands, a gesture which said, "I just went along with the others. My talents are such that in any political setup, I am going to have a good job. They call it adaptation. If dictatorship was the fashion, I would be one of the dictator's trusted henchmen. If kings were in vogue, I would be a duke. If democracy was in style, I would be a senator. If a pseudo-democracy was in existence, with all the outward trappings of a president and a congress, to fool the people into believing they are free, but with everybody actually taking orders from Mr. Big—well, I would be a colonel in Food Controls. Or maybe a major in education, my job being to convince all the people I could that ours was the best possible nation in the best of all possible worlds."

The colonel thought: We've done a good job of selling this line of propaganda. Everybody believes it, except a few defiant rebels, and occasionally ourselves. It's adaptation, boys. We are adapting to our environment and to our times. It's nature's way—

"*You are a liar, sir.*" It was his inner voice speaking.

Colonel Day looked around and swallowed. Schwartz was looking at him. The expression on Schwartz's face said he was not prepared to believe this of any of his fellow men.

"This is not true, is it, sir?" Schwartz spoke.

The colonel could have said it was the biggest lie ever told on earth. He could have shouted and screamed that Jon was a liar and a traitor. It is easy to call a man a traitor when he doesn't agree with you. The colonel had several outs but somehow or other, at this moment, outs were not what he wanted. Lies were beginning to stick in his throat. All his life he had lived by them and with them and now he was sick of them.

"It is the truth," he said. At the words, he saw sudden, but wary, respect appear in Jon's eyes.

"Who'd have thought there was such a thing as an honest politician?" Jon said. He glanced at Schwartz. "Does that satisfy you, sir?"

"It satisfies me," Schwartz said. He rose to his feet and picked up the brief case. He looked sick.

The colonel watched Schwartz limp toward the door. It was in his mind that they would leave now, all of them. He wanted them to leave. They had unmasked him. He didn't want to see any of them again, ever, especially Jennie.

"Come on, Colonel," Jon said. Jon was suspicious. "We can't afford to leave you behind. You're going with us."

Maybe Jon had a right to be suspicious. Maybe the colonel was trying to trick him. A man never knows what is actually in his own soul. As the colonel got to his feet, he touched with his foot the button under his desk, which sounded an emergency alarm in the office of the Security Police, located less than a block away.

He thought: I will be rescued, Jon and Edward will be taken and executed, Schwartz will be captured and kicked around until his secret is clearly understood, then he will be executed. Jennie will be rescued.

But he knew she would know who had sounded the alarm. She would never speak to him again.

He shrugged. Well, what of it? Schwartz was the important one. The man who captured him might get promoted to general. The thought pleased him. All generals got statues erected to them. Maybe the Department of Education—propaganda to the really educated—would set up a statue of him in the sparkling little park across the street. Jennie would see it and—

THEY walked through the reception room and out of the office. Edward went first, as a lookout. Schwartz followed him. Jennie came next, then the colonel. Jon brought up the rear. The guns were not in sight. Outside in the corridor they ran into Major Richards, from Censorship. Richards and the colonel were friends.

"Hi, Colonel. Starving anybody today?"

"Hello, Major. Yeah, a few. Are you fooling anybody?"

"A few." The exchange was a standing joke between them. If it reflected grim reality, they didn't care. They had food cards, they belonged to the Organization, they were safe. Or were they?

Major Richards grinned and stepped into the automatic elevator. He was in charge of the censorship section that monitored all radio programs released in this area. His office and a monitoring service were on the top floor of the building. Any program that the monitors didn't like could be cut off the air. They worked so smoothly that the majority of their listeners never knew that censorship existed. When a cut was made in a program, it was always in the interests of good taste," a phrase which covered anything they wanted it to cover.

They took the elevator down. The

lobby was almost deserted. Edward went out first, moved into the lobby, then turned and came back quickly.

"Back into the elevator," he whispered. "There are a couple of cops in front. They're looking for somebody."

"If they're out there looking for somebody, the chances are it is for us," Jon said. "In that case, we're caught." His eyes sought the colonel's blank face.

"Why don't we just let them catch us?" Schwartz said. He clung to the bulging brief case. "This is the important thing. When they see what I have here, they can't afford not to take advantage of it."

"Take advantage is right!" Jon said.

"We can hide in the building," Edward said.

"If they're actually after us, we can't hide anywhere," Jon said. "I have a feeling they've been tipped off. If they have, then there will be a hundred cops around this building within five minutes."

Edward's heavy face was placid. "Okay, I'll go check. Maybe I was mistaken."

Looking like a man going out for a stroll, he walked out through the lobby. As he passed through the outer door, he was stopped by a plainclothesman. For a moment, the cop and Edward talked, arguing. The colonel could almost hear the cop demanding Edward's food card, which also served as identification.

Edward could claim he had lost it, he could claim it had been stolen from him, but—there was the matter of that emergency alarm. With that alarm still ringing in his mind, the cop would not take chances. Edward must have realized this too. He slugged the cop and started to run.

It happened so quickly that no one quite realized it was happening. Edward reached the middle of the street. Then something went brrrrrrp. Edward went down.

"Edward!" the colonel said. "Thunder, that's my name!" He seemed to be talking to himself.

"Get in the elevator," Jon said. He punched the button for the top floor. "I guarantee the colonel will not outlive me," he said.

Maybe that's what did it. Maybe the way Edward had gone out to check, knowing he would die if he was wrong, was what did it. Maybe the way Jennie looked at him had something to do with it. Maybe the elevator shooting upward, pulling the blood away from his head, helped to do it. Maybe a lot of things had a part in it. Maybe he was simply sick at last of adaptation. Maybe he wanted to be honest, just once, in his whole life. Maybe his mind cracked.

He began to laugh. In the silently rising elevator Jon and Schwartz and Jennie stared at him. "What's so funny?" Jon said.

"I'm thinking what a good joke this will be on somebody," the colonel said.

"Huh?" Jon grunted.

Day pointed to the brief case. "You want the information in that case to get out to all the people, is that what you want?"

They stared at him. "Of course," Schwartz said.

"Then follow me." The elevator hissed to a stop. Day stepped out.

Jon jammed the gun in his back. "What are you going to do?"

The colonel told him what he was going to do. Jon looked like a man who does not believe the words his ears have heard. "All right," he said at last. "But if you trick me, Colonel—"

"What will you do?"

"I'll kill you," Jon said.

"And if I don't trick you?"

"I'll apologize—when the time comes."

Day laughed again, more softly this time. He pressed the buzzer on the door of Major Richards' office. Richards recognized him through the bullet-proof glass panel set in the middle of the door, opened it.

"Come in, Colonel. The others, though, will have to stay out. I'm sorry

but that is what the rules say."

"I know," the colonel said.

He moved past Richards, closed the door. It would be so easy, it would be so simple, now, to tell Richards what had happened. He could call the police. Nothing to it at all. The colonel grinned, and slugged Richards. In his time Day had slugged a few men. He knew how to do it. He needed maybe thirty seconds to knock Richards cold and get the door open again.

Jon's eyes as he came through the door were warm and friendly. "Well done, Colonel."

SURROUNDING Major Richards' desk was a large semicircle of small, glass-enclosed cubicles. In these glass compartments men were sitting, listening, watching. They were the monitors. One had already noticed that something had happened to Major Richards and was getting to his feet. The colonel looked at Jon, and Jon pulled his gun. The monitor sat down again, hastily. The colonel bowed to Schwartz.

"You have a message, sir, that you wish to give to the world." His voice was pleasant. "Please take this seat." He indicated the chair where Richards usually sat.

"Thank you, Colonel," Schwartz said.

The monitors didn't like what happened but there was nothing they could do about it. Before they fully realized what was going on, they were out of their booths and locked in the washroom. Every circuit in the room was hooked into the mike and the camera at the desk where Schwartz was sitting. Schwartz was smiling. Jon was grinning.

Jennie came close to the colonel. "Eddie—" she began.

"You get out of here," the colonel said. "Get back to our office."

"No, Eddie," she said. "I'm going to stay here." He argued with her. As her superior officer, he ordered her away. She wouldn't budge. "I have a right to

[*Turn page*]

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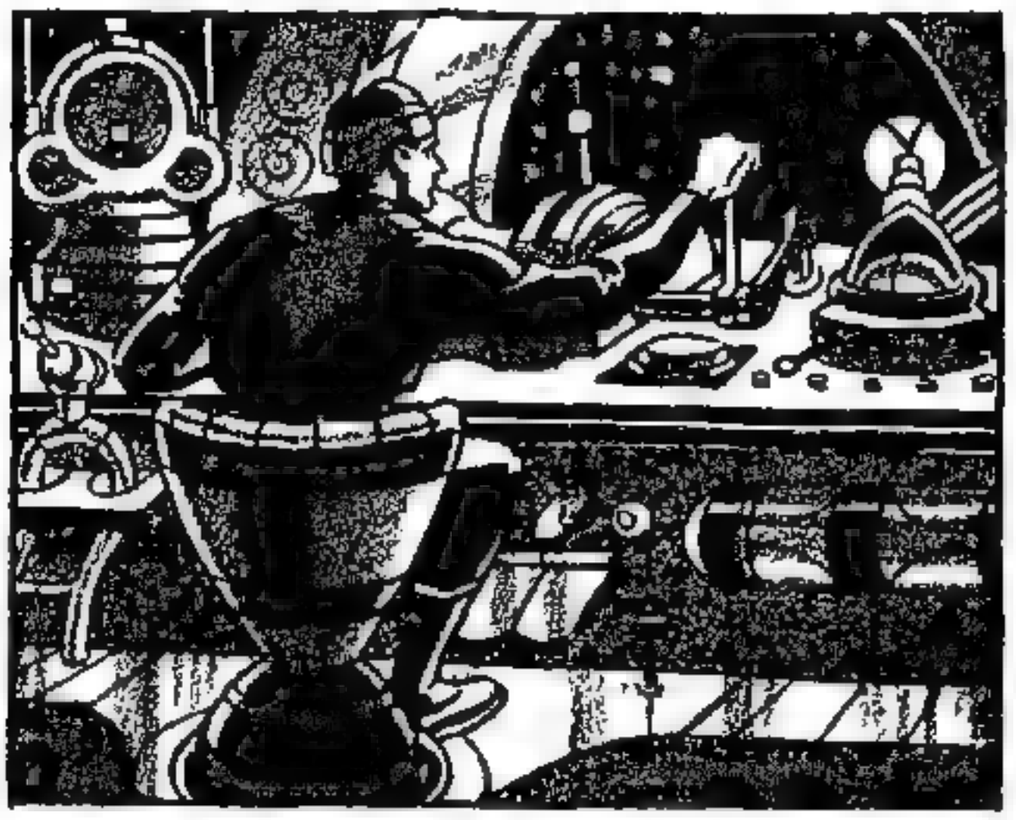

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stay here, Eddie," she said.

"Okay," the colonel said.

Jon cut in the camera and the mike in front of Schwartz. Simultaneously, over every radio and television circuit serving the New York area, and over many transcontinental hookups as well, his voice went out.

"Friends—" he began. He looked like a man who has realized his life's dream. "I bring you glad tidings of great joy. The end of the food shortage in this country and in the world is at hand."

A friendly face suddenly appeared on television screens all over the world, a friendly voice spoke softly from the radios, telling every listener that the days in the wilderness were finished, that they had reached the promised land.

Schwartz had not been on the air more than two minutes before one of the phones on Major Richards' desk began to hum. Day moved toward it. He knew it was a special line and, even before he answered it, he knew who would be on the other end. But he didn't hesitate.

"Richards, do you see what's getting on the air?" a harsh voice grated in his ear.

Mr. Big's voice. The colonel would know that voice anywhere he heard it on earth—or in hell. For an instant, he hesitated. Old habits of adaptation tugged at him. He shrugged them away.

"This is not Richards," he said. "Yes, we see and hear what is going on the air. We are—ah—putting it on."

"What?" There was a gasp at the other end of the wire, then a click, then silence. Very gently the colonel slipped the phone back on its resting-place.

"The big man?" Jon asked.

"Yes."

Jon's lean face worked. "Colonel, I apologize," he said.

The colonel shook his head. "Apology refused," he said. "A man has a right to make up his own mind. I had—ah—forgotten that, for a time. Later, perhaps, you can apologize, but not now."

Jon, guessing his meaning, nodded. The lines on his face became grimmer. He moved to the windows, stood looking out. After a few minutes he beckoned. The colonel and Jennie moved to his side.

Down below the streets were deserted, except for the police. Far off sirens were whining. Mr. Big had sent the reserves. He knew that the source of this broadcast was in Censorship and he knew what to do about it. Or thought he did.

"How long do you think it will be?" Jon said.

The colonel estimated swiftly. "An hour. Maybe less." His eyes focused on a single car coming along the street. All other cars had been stopped but this armor-plated limousine came through. Mr. Big's machine. He had come to direct personally the removal of this menace to his safety.

Mr. Big knew that thousands of competent technicians would see Schwartz's diagrams and would hear his explanations of them. Probably all they really needed to know was that it could be done. With that assurance, they could work out the details of photosynthesis. Schwartz was giving them formulae, diagrams, working plans.

Jon, looking down the side street, said, "Hello. We're beginning to get results."

Down this side street hundreds of people were moving, a flowing river of humanity. The police were trying to hold them back, but the people were pushing forward anyhow.

"Maybe—" Jon began, sudden hope in his voice.

"We had better not count on it," the colonel said. As if to corroborate what he said, there was a clang of metal on the steel door that opened into the corridor. He glanced at the door, wondering how long it would hold against determined attack.

"Look!" Jon whispered, excitement making his voice tremble.

Mr. Big's chauffeur had made a wrong turn and run into the approach-

ing mob. There must have been rebels in that crowd. Certainly there were men present who recognized Mr. Big. Fists were shaken at the car, clubs lifted. As the chauffeur frantically tried to turn it around, the mob flowed over it. Somebody thrust an iron bar through a front wheel, jamming the steering apparatus. The chauffeur stepped down hard on the gas. Mowing down people, the car slewed in a semicircle, crashed against a wall. Through firing vents in the bullet-proof glass smoke spurted as the guards inside began to fight.

A lot of people died down there. But the mob was like a hydra. When one man went down, two took his place. Clubs and iron bars battered through the sides of the car.

They saw Mr. Big come out of his machine. Like a fat hippopotamus, he lurched out of the car, waving his hands and shouting at the mob, like Canute telling the sea to stay back from him. But this sea hated Mr. Big. It hated him as perhaps no man was ever hated before. It rolled over him. When it had finished rolling, there was nothing but bloody pulp left on the street.

"That I should see this day!" Jon breathed. He seemed dazed, lost in a trance. "That I should see this day. Now, no matter what happens, it is worth the price."

A thunderous explosion inside the room jerked their eyes back to the door. They saw it go down. Through it poured a mob of men. They saw Schwartz first, at the mike. Guns came up, crashed fire.

Schwartz died with the glow on his face.

The Security Police turned toward the others. Orders had been given that no one was to escape from here, and there was no authority to countermand those orders now.

"Is it time for me to apologize now?" Jon whispered.

"It is," the colonel answered. He squared his shoulders, lifted his chin, held Jennie very close. In this moment, he looked like a real colonel.

They stood very close together, the colonel, Jon, and Jennie.

IN the little park across the street, there is a bronze group of four figures, three men and a woman. When the trouble was over and order restored, somebody must have figured out who was who and what had actually happened. History, which misses so many important things, did not miss this one.

The central figure in that bronze group is a small man. He is looking up, looking off toward some faraway world where the sky is always bright and the hills are always green, where the earth always gives forth its produce and men are sometimes better than they are. When the sun shines a radiant halo forms above the man's head. Children from the neighboring settlement houses play around the statue and tourists come to see it and workingmen eat their lunch near it in the little park.

The second figure in the group is a lean tough man, a rebel. Some in the throngs who pass here may recognize Jon.

The third figure is a man with squared shoulders and lifted chin and the fourth is a woman, who stands very close to the small man, clinging to him.

Carved in the granite base of the statue are these words:

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Martian Expedition
Number One Returns . . .

VIA DEATH

By GORDON A. GILES

HELLO Earth!

Martian Expedition Number One resuming contact via etherline radio. Operator Gillway speaking.

Eight hundred and forty-seventh day since leaving Earth at last opposition. Forty-first day since leaving Mars. Batteries only at half-charge, since the sun-power mirror needs polishing, but presume this is going through to you as we are now within a half-million miles of Earth.

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Please return call immediately, acknowledging contact. Standing by . . .

. . . Okay! Needless to say, we are glad to hear that a rescue ship is in readiness. We will undoubtedly have to land on the moon. Our fuel supply will be barely enough, Markers says, to brake against the moon's small gravitation. Landing on Earth, we would not be able to reduce speed safely and would probably burn up in the atmosphere.

But believe me, we are happy to be once again near the Earth-Moon system, which is like home after our sojourn out Mars-way for over two years. Too bad Cruishank, Proosett and Alado can't be with us. But they lie buried under the golden sands of Mars—martyrs to this venture.

We do not regret our adventure in the least. It has been a thrilling experience. We have viewed the hills and deserts of another world. We have seen alien creatures of another evolution. We have battled giant three-foot ant-creatures. We have discovered pictures and records of a dead civilization, mysteriously linked with Earth's past.

Yet the grandest moment of all came just yesterday, when Earth changed from a star to a small disc. Home! That was the simple, humble word that made us all choke when Dordeaux said it aloud. A moment later he wept unashamedly, but no one blamed him. I don't think any of us were dry-eyed.

To recapitulate briefly: The asteroid Anteros, with its eccentric orbit, carried us faithfully from Mars' orbit toward Earth's in thirty-four days, as Markers calculated. We owe that tiny body a deep vote of thanks. Our limited fuel supply would not have been able to carry us across that forty-million mile gulf in less than a year.

Will resume tomorrow; batteries low. Music would be much appreciated, if you can supply us.

EIGHT hundred and forty-eighth day.

All went well during the trip, though once our gyroscope stopped and we wobbled dangerously close to Anteros' fiinty surface before the mechanism could be fixed. We then resumed our short orbit around the asteroid, as its satellite.

We had a narrow escape yesterday when we prepared to tear away from Anteros' gravity. Suddenly our rockets went dead. It was imperative that we break immediately away from the asteroid's gravitational grip—else it would carry us past Moon and Earth and sweep us outward again!

We went over the engines like maniacs. Parletti finally noticed that the fuel line was clogged. We had a laugh over that, for Parletti is a geologist and doesn't know much about engines. The line fixed, our rockets easily floated us away from Anteros. We gave that little planetoid nomad of the void a rousing cheer as it receded.

But here we are, approaching the moon's orbit at five miles a second. The moon, in turn, is bearing down toward point of interception at nine miles a second. It will take some neat figuring to escape a crash. Markers and Captain Atwell have worked thirty hours consecutively on the computations. Because our coffee supply is exhausted, they take a swig of pure oxygen now and then as a stimulant.

We are now the same distance from Luna as Earth is, but on the other side. We have been examining this mysterious Other Side, that Earth never sees, with our telescope. It looks no different from the Earth-side, with the usual craters, broad plains and sharp-edged mountain ranges.

Naturally, one could not expect it to be different.

Power fading; au revoir till tomorrow.

Eight hundred and forty-ninth day.

Urgent!

Send the rescue ship immediately and have its radio open for our call.

A rather grave situation faces us. Originally, we had planned to land

somewhere on the Earth-side, noting the approximate location according to the standard Lunar map. This would have simplified the rescue ship's task of finding us.

But now, checking and rechecking the figures without avail, Captain Atwell announces that we must make a forced landing on the Other Side!

Our approach, of course, had been from Mars, toward the Other Side. Atwell had hoped to circle the moon halfway around with our momentum and land on Earth's side. But due to adverse factors of orbits and speeds, this might result in a bad crash. Our only hope, it seems, is to bear down obliquely on the Other Side, take up the proper tangent, and brake with our last bit of fuel for a landing there.

We are now about twenty thousand miles from the moon. We will land within the next half hour. Swinerton is rapidly sketching in a general map of the Other Side. We will try to land in some wide, open space, in direct sunlight, and note the nearby landmarks. This will make it simpler for the rescue ship to find us.

Must stop now. If our luck holds out, and we make a successful landing, we will contact the rescue ship immediately afterward.

EIGHT hundred and fiftieth day.

Successful landing!

Martian Expedition Number One contacting the rescue ship. Received your call a few minutes ago. Captain Atwell sends his grateful thanks to your Captain Macklyn, his old friend, for his encouraging words—"We'll find you if it takes a year!"

Our landing was fortunate. We scudded down in a large, smooth plain of cheeselike pumice stone. We missed a rim-wall by millimeters. The rear part of the hull sprung a small leak by the strain of the landing. Graves agilely slapped a rubber patch over the slit before the air pressure had dropped much below normal. All of us have bruises. Markers was knocked unconscious against the wall, and Dordeaux has a broken arm. Parletti already has it set and in splints.

Now we come to your problem of finding us. Frankly, it will be a task. We realize our chances are pretty slight. We are in a vast territory unidentifiable to either of us by definite landmarks. Your party must somehow locate our tiny speck of a ship in hundreds of square miles of limitless, jumbled topography.

We will try to guide you as best we can. Fortunately, the stars shine with the sun in this Lunar sky, making observations of positions possible. Markers has computed, as nearly as he can, that we are about thirty-one degrees from the western edge of the known Earth-side. And about seventeen degrees from the Lunar north pole.

Going by Swinerton's sketch, the plateau we've landed on seems to be bordered a few miles west by a long range of mountains which run north and south. We can see their ragged peaks outlined against the stars. Just to the south of us, about five miles distant, is the rim of a crater that is probably fifty miles in diameter. This crater forms a triangle with two other large craters further east. From the glimpses we had while descending, the line of bisection of the base-line opposite the nearest crater, extended through the latter, points almost directly toward us.

Captain Atwell has thought of a way of indicating our position. He has just sent Greaves out in an air-helmet with our one remaining seleno-cell. Greaves placed it about three hundred yards from our ship. As soon as its charge builds up from the strong sunlight, it should start shooting out fat sparks, similar to those that killed the ants on Mars. There is just enough vapor-pressure here on the moon's surface to duplicate the interior of a vacuum-tube, to carry the charge and ground it into the rock.

These sparks—there goes one now—are an intense bluish in color and will be outlined strongly against the white plateau floor. You should be able to recognize them easily.

That is about all we can do. The rest is up to you.

And now something very vital. Markers has also calculated that the slow but certain Lunar-nightline is descending upon us. We have something like thirty hours of daylight left and then we will be engulfed in the total blackness of the moon's long night of two weeks. Searching activities would be impossible during that time.

Since it is doubtful if our air supply would last that length of time, we can only hope that you will locate us in the next thirty hours.

I will keep in direct touch with you beginning in an hour, after I have gone outside the ship in an air-helmet and polished the sun-power mirror.

By the way, Greave's venture out has settled a long disputed question among scientists—as to whether a person would freeze quickly in the near-vacuum of space. Greaves was out for an hour, heavily bundled. He says he felt warmer than on Mars with its atmosphere. Evidently, the conductionloss of body heat in a cold atmosphere is greater than the radiation-loss in a vacuum.

Our morale is high. We are sure you will find us soon. We are looking forward to our arrival on Earth.

EIGHT hundred and fifty-first day, (1 A.M.)

Captain Atwell to Captain Macklyn. Buck up, old boy! You must not condemn yourself so bitterly for not finding us in these last ten hours of search. You are searching a world, man! An unknown world. We know you are doing your best. We can ask no more.

Gillway speaking. The long narrow shadow of the nearest mountain peak crawls slowly along, but we are all in good spirits. The moon is an interesting, if cheerless place.

Greaves, examining closely the shaving of pumicelike stone through which our ship plowed, announces that it is impregnated with silver. So the proverbial linking of Luna with argentum is not so far-fetched after all.

Parletti has examined the surrounding formations with the telescope. He has devised a complete crater-theory from the one we can see—a crater that shows signs of having been eaten out! With an amused smile that covers a serious meaning, he suggests that long ages ago the moon had an acidic atmosphere. This condensed gradually, forming pools all over the moon's surface. The pools steadily ate their way down into the rock.

Markers has sketched the sun's corona and halo a dozen times, as it subtly changes from hour to hour. He predicts that when interplanetary travel passes into an active stage, the moon will quickly be equipped with a great astronomical observatory. A telescope on the moon has a thousand times the effectiveness of one on Earth because of perfect visibility.

The nearest mountain looks scalable. It is about two miles high. It has unweathered outcroppings that form a regular series of giant steps to the peak. Swinerton, whose hobby on Earth was mountain-climbing, says he could negotiate it in twelve hours. I wouldn't doubt it, in this ridiculously light gravitation. Greaves can jump twenty feet high without effort.

Though slightly feverish from his broken arm, Dordeaux induced the others into singing. It helps relieve our nerves. They are singing now. "There's a long, long trail a-winding —"

Eight hundred and fifty-first day. (11 A. M.)

Only six more hours of daylight left.

We realize the difficulties facing you in locating us. We can't seem to hit a mutually recognizable landmark or topographical formation. We don't remember the two mountain ranges form-

ing across that you mention. Perhaps you are still too far west of us. Are you certain that you can't make out three large craters forming a triangle? It is very definite here on Swinerton's map.

I thought perhaps I could tell you when you were drawing near by watching for an increasing strength of your radio signal, but I haven't noticed a bit of variation. I surmise from that that you are still a considerable distance away. I think I know why your attempts to locate any transmitter at the bisection of two or three beam-lines failed. I've been getting echoes from all directions. The mountains must be loaded with magnetized metals.

Markers has checked the longitude again; it still comes out close to thirty degrees west. Assuming an error of five per cent at the most, we are within thirty miles to the east or west of that position. Similarly, we are within thirty miles to the north or south of our computed latitude. So we have hopes that you will find us yet, though you have an area of three thousand square miles to explore, with no recognizable landmarks to go by.

The seleno-cell outside our ship is steadily flashing out its sparks, about every ten seconds. This should be visible within a radius of ten miles. Captain Atwell, staring at the mountain peak looming near, says that a seleno-cell placed up there would be visible for fifty miles at least. But that is a useless thought. Ironically, even if we did wish to try getting it up there, no one can approach the cell now without being electrocuted. It will keep operating while there is sunlight. The two other seleno-cells we had lie useless on Mars.

We talk of nothing but Earth here. How it will look to us after our long absence. How green and lovely its fields, how sweet its air, how wonderful its foods—and its security. Earth is paradise! Greaves swears that after arrival he will fall down to the ground, bury himself in glorious mud, and stay there for three days. All of us have fantastic notions of what we want to do when we get back. Parletti is going to eat a roast steer, complete. Personally, I'm just going to fill my lungs with good, clean air, again and again and again—

Message from Captain Atwell to Captain Macklyn:

Macklyn, only desperation brings me to ask this. In six hours, if we are not found, we will be plunged into two long weeks of Lunar night. Our chances of living through that period are mighty slim. I have brought these six men to Mars and back, surviving many perils. I would hate to have them doomed now. Thus, I suggest, though it entails great risk for your ship, that you lower your vessel to within a mile of the moon's surface. If you then describe a large circle and keep shifting its center, you will soon have passed over most of this territory. You cannot fail to see us at a mile's height. But it will take constant rocket power and diligent maneuvering to do this.

I make no appeal for myself, Macklyn. I appeal only for these six brave men at my side.

EIGHT-HUNDRED and fifty-first day. *(6 P. M.)*

Black, chilling night surrounds us!

Captain Atwell wishes to thank you men of the rescue ship for your gallant effort, flying your ship at only a half mile above the moon's dangerous surface. It was our fate not to be found.

All of us watched closely for your ship, in every direction. Once Dordeaux thought he saw a black speck and a tiny red rocket flare, but when the rest of us looked, nothing was there.

However, there is one remaining hope, now that we are surrounded by utter blackness of night. We have a few ounces of fuel left in our tank. We will discharge it from our uppermost rocket-tube. It should make a bright beacon if burned slowly with oxygen, perhaps enough to land by.

Markers suggests that you rise to a

height of ten miles wherever you are and watch below in all directions. Signal me when you are in position and we will then light the flare.

Eight hundred and fifty-first day. (7 P. M.)

Captain Atwell to Captain Macklyn.

No! You must not try landing, though you saw our flare and were able to approach part way before it went out. I forbid the landing attempt, Macklyn —as you wouldn't have one chance in a million of landing without a bad crack-up in the dark.

We had expected the flare to burn a while longer. Fifteen more minutes and it would have given you time to approach and land. But too late now. However, my men and I join in saying, for the offer alone—God bless you!

You must now go back to Earth and come back in two weeks. Or, if you have plenty of supplies you can rise to a height of a thousand miles or so and simply drift there, unpowered, and wait. You must be prepared, if you locate our ship when daylight comes again, for the possibility of finding dead men instead of living.

Gillway speaking. Our morale is still high. We have faced worse hazards. Captain Atwell had put us on emergency rations from the moment of landing. Beyond a general feeling of lassitude, there are no ill effects.

Parletti carefully examined our air-supply and says that by a stretch of imagination five of us, or at the most six, could live on it for two weeks. How seven of us can survive, the Lord only knows.

Must conserve battery-current for heating unit. Martian Expedition Number One signing off until the Lunar dawn.

EIGHT HUNDRED and sixty-fourth day (3 A. M.)

Hello to those aboard the rescue ships!

Martian Expedition Number One re-

[*Turn page*]

Are YOU In This Picture ?

So many people think it is their fate to struggle through life, barely making ends meet, and having discontent and turmoil surround their every effort. You are possibly one of these.

But right here and now we want to say to you that THESE CONDITIONS ARE NOT PART OF YOUR NATURAL HERITAGE! Do you think that SUCCESS, PEACE, and MATERIAL ABUNDANCE are only for the other fellow—not you? Don't you think you have the opportunity to CHOOSE WHICH PATH WILL LEAD YOU TO OVERCOMING VICTORY?

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suming contact after two weeks. Dawn silently stole over this desolate world an hour ago, recharging my depleted batteries. It was a glorious sight to see the sunlight again –but painful also. When last we saw the sun, there were seven of us. Now there are only five!

Outside our airlocks lie the bodies of Swinerton and Dordeaux. They voluntarily sacrificed their lives, so that the rest of us might survive. God rest their souls!

We five that are left now have about four or five hours of oxygen left. We hope you can find us in that time.

Now to go back two weeks: After the black of Lunar night had closed in on us, despair came with it. We were hopeful when our last bit of fuel was used as a flare, but when that failed, we knew our situation was really desperate.

Our air supply, no matter how many times Parletti and Markers figured it out, could not last seven men for two weeks, even at the one-fourth normal consumption rate which we had already cut it to. Finally, at the end of that first day, Swinerton tried to get out at the air-lock but Greaves stopped him just in time.

Swinerton said simply, "One of us has to go now, or seven of us will go in the next two weeks!"

We all looked at one another haggardly. There was no escaping that deadly logic. Captain Atwell then said, "Men, my leadership is no longer needed—"

The rest of us shouted him down on that before he got any further. Each of us volunteered to sacrifice himself. Melodramatic? The world will never understand. The decisive voice of Captain Atwell finally quieted us: "We will draw lots!"

That, of course, was the only way. Using the time-honored short and long stick, Captain Atwell offered lots to each of us. He drew last, with Parletti holding the sticks. Seven times the process repeated, to eliminate us one by one.

Finally it narrowed down to Swinerton and Dordeaux. I will never forget that final scene. None of us will. Swinerton tight-lipped but calm. Dordeaux pale, favoring his broken arm. The rest of us far more nervous than they. It is engraved in our memories forever.

Each drew three times—with death standing over their shoulders, watching. Swinerton drew two shorts and one long. He looked up with a brief, grim smile. The odds were strongly against him.

Dordeaux drew three shorts in a row, however. Swinerton looked dazed at this sudden reprieve. Dordeaux wasted no time. After a simple farewell and handshake with each of us, but with a depth in each movement that those on Earth will never know, he stepped out of the air-lock.

We saw him stagger away from the ship, out into the airless void. He turned into the deepest shadow of the ship, away from the ports, so that we would not see him die. Not many words were spoken in our cabin in the next hour.

In answer to your query, our map does not show the mountains you mention to the northeast, nor can we see any. But it is likely that Swinerton left them out in his hasty sketching, as he did not have much time while the ship was maneuvering down.

Will resume in an hour, when my batteries build up more of a charge from the sunlight.

Four A. M.

After Dordeaux was gone, we settled down to a routine to pass the interminable hours. We clung to the floor as much as possible to breathe less oxygen, but we seldom slept. Captain Atwell forced us to keep a card game going with rotating partners. The vague interest in this and the noises it made helped us to forget the awful stillness about us.

At times, though, there would be moments of utter, stifling silence which would hold us in a sort of hypnotic trance until someone coughed. Then we

would all cough and scrape our feet and make noises, not wanting it to happen again.

We dared not use the radio, as I said, since our batteries were not any too well charged. To conserve, Atwell ordered that the one dim bulb we had burning must be on only half the time. He also cut the heating unit's output to its barest minimum. Thereafter, we existed in a temperature not much above freezing, with all available clothing on our bodies. Radiation of heat from our ship, over the days, mounted to an almost complete loss, though it was a slow process.

Our food rations also had to be cut, for that too had reached slim proportions. One-quarter protein-stick a day and one biscuit for each of us, washed down with a gill of water.

The thought of seeing Earth once more kept us alive. We also speculated what a sensation our pictures and records of former Martian civilization would create. These will eventually be found and brought back to Earth, even if we are not. That alone comforts us.

We are keeping sharp watch at our ports in every direction. If we sight your ship, I will radio immediately.

Air gauge pretty low now.

Five A. M.

It is simple to tell of Swinerton and why he lies outside—dead.

SOON after Dordeaux had gone, Swinerton addressed us all and insisted that he should follow. Five, he argued, would have an excellent chance of surviving, whereas six was still doubtful, as Parletti admitted. By drawing of lots, Swinerton insisted, he was next to go anyway. Swinerton did not say these things in any exaggerated fashion. There was no fanaticism in him. He was one of those rare individuals who think things out calmly and dispassionately and then do them, or try.

Captain Atwell, however sternly forbade any further discussion of the subject. Thereafter, he slept and rested

[*Turn page*]

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almost continuously, rolled in blankets, before the air-lock.

On the second night Parlettti, whose bunk is just over Swinerton's heard a strange, stifled gasping. We found Swinerton with a strip of cloth twisted tightly around his neck. His purpose, though he would not say a word, had been to strangle himself quietly so that we would have a better chance.

We all kept an eye on him after that. It was no good to talk to him, tell him he was wrong. Perhaps he was insane. But it is not for us to judge.

He seemed to get over it in the next three days. We relaxed our vigil. He joined us in our card game and conversation as though nothing untoward had happened. But he would sit for hours when the cabin was dark, staring out of a port at the looming, jagged mountain nearby as though still thinking he would like to meet its challenge.

We all spent much time at the ports for that matter. Somehow, the moon is a fairyland in the starlight, its harshness softened. Surprisingly, in this airlessneses, the starlight has considerable strength. Every detail of the night scene stands out.

The third night Swinerton was gone! Atwell had fallen into an exhausted sleep at the air-lock. Before he could jump up, he heard the levers squeak—Swinerton had got into the lock chamber. Atwell stood by helplessly, hearing the outer lock swing out and then clamp shut again. We found the captain there.

"There went the bravest man the world has ever known!" he said hoarsely. And that, if we who are left are not alive to carry it out, is to be the epitaph on Swinerton's tomb. Remember!

Six A. M.

There is not much more to tell of those two bitter weeks. Aching lungs, starved bodies, blue-cold fingers—and the silence. That damnable silence! Well, we have survived it and when we saw the first bit of the sun's rim climb over the horizon, it was the end of an eternity.

The coming of the sun has raised our spirits as well as our thermometer. We are keeping sharp watch for your ship. We are not losing hope. We have cut our oxygen stream a little lower again. You have been searching for three hours so far, since the dawn. There are one or two hours to go.

Atwell has just announced something strange. The huge shadow of our guardian-mountain has retreated enough to reveal the space before our ship. The seleno-cell is gone!

Furthermore, Swinerton's body cannot be seen anywhere around the ship! The corpse of brave Dordeaux is plainly visible. And now a third thing. An air-helmet and small oxygen bottle which goes with it are gone!

What does this all add up to? We can guess but it seems incredible. Captain Atwell has just gone out in our spare air-helmet to bury Dordeaux. We will then hold a brief mass for him.

Six forty-two A. M.

Attention, rescue ship!

Markers has just noticed a moving light among the stars to the west. It may be your ship. There is a breathless silence in our cabin, and a prayer on every lip. Our oxygen gauge's needle is almost touching the zero mark.

Yes—it must be your ship!

Or rather, the orange-red flare of our rockets. Slow down and turn east immediately—but I see I am giving you needless directions.

You are now approaching, as we can see the rocket blast getting brighter.

You are now crossing the mountain range. The plateau beyond is the one we are on. We can make out the outline of your ship now. Captain Atwell says not to lower for a landing from that direction, as the plain is shorter that way. Swing south and come up to us from that direction.

You can see our ship now? Thank God—we are saved!

It is clear now. Those giant blue sparks that are playing around the peak

[Turn page]

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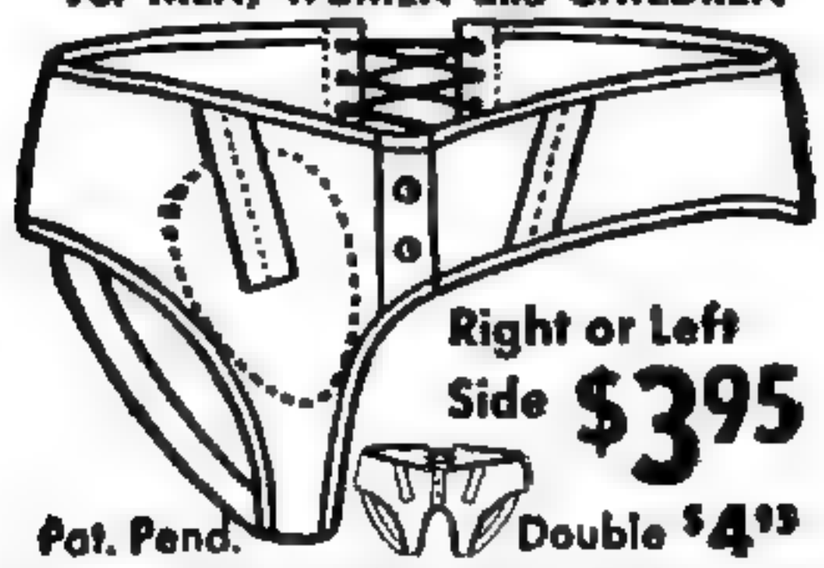

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of the mountain nearest us, and which you saw from fifty miles away, are from our missing seleno-cell!

Swinerton's body must lie beside it, lifeless since ten days ago, when he left us. None of us suspected at the time that he had taken the air-helmet. He had oxygen enough for about twelve hours. He had said he could climb that mountain in twelve hours. And he did, in the starlight, carrying the seleno-cell!

We have already written Swinerton's epitaph. We cannot add to it. Someday we will have those words engraved on the side of that mountain, in letters of gold.

But now, what shall we say of Dordeaux? Burying him, Captain Atwell noticed his one hand half open, holding something he had been clutching before death overtook him. It was simply a bit of wood—one of the short sticks we had used in drawing lots. We had noticed Dordeaux fumbling the sticks he drew each time with his two hands, but we had attributed this to his broken arm. Now it is obvious that the sticks he showed and the sticks he drew were not the same!

He had an eighth substitute short stick all the time, with which he made certain his own sacrifice!

WE CAN see your ship lower now, a long sleek craft. Careful! Keep the nose up! There! As you touched and plowed along, a sparkling shower of pumice-spray surrounded you.

And as your ship stops, not a half mile away, my companions are cheering and screaming and pounding one another on the back—I'll join them in a moment. Soon you will be coming to us, in air-helmets, to take us into your ship. Soon we will be on Earth! We can hardly believe it yet.

By the grace of God, five of us live to see this great moment. But only at the price of others whose names will go down forever in the history of man.

Martian Expedition Number One signing off.

COSMIC ENCORES

(Continued from page 6)

that our globe is a pretty small place—hardly worth fighting over.

Anyway, we'll take science-fiction.

Stories New and Old

Science-fiction fans are nothing if not loyal. Their memory for the old stories never ceases to amaze us. And equally amazing is their insistence that these old stories be reprinted instead of being allowed to die. A letter from Ned Reece, of Kannapolis, North Carolina is positively wrapped in joy that FANTASTIC is recalling so many of the dear departed. VANDALS OF THE VOID and THE CONQUERORS each got a pat and TWICE IN TIME, reprinted in WONDER ANNUAL would also have won a medal if it hadn't been too recent to quite suit Ned's antiquarian fervor. "Give us the older stories first," he asks, no doubt on the theory that the newer ones will have properly aged by the time we print them.

This is interesting, not only because it is typical of reader comment, but because it damages our own feeling that modern stories are somewhat superior to the old. The old stories were great stuff in their day, they were pioneers and all that, but no one can deny that science fiction has traveled many parsecs since THE GIRL IN THE GOLDEN ATOM.

To us the old time stories contained the same sort of interest with which we might view the well preserved replica of the old Concord stagecoach on view in the capital of New Hampshire. Nice, but for day to day riding we'd stick to the streamliner. That was our theory. And we must admit it has been upset no end by the enthusiastic reaction of readers to our selections. Ned Reece is far from vague about it. "My hopes are that in the near future FANTASTIC will come out six times a year and WONDER ANNUAL four. Please keep all new stories out of both mags for there are so many old ones that need to be reprinted."

The ANNUAL will continue as is, but FANTASTIC will carry a share of new stories.

We scrounged around to see if we could find a dissenting voice to this chorus and with some difficulty located a fan named Jan Romanoff, of Lomita, California, who dissents. He says the stories of ten to fifteen years ago are so stereotyped that they are virtually unpalatable to the old fen. It is not so, he admits, with the new-

[*Turn page*]

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comers to stf. Since they don't know too much about it, they accept these stories as standard. And, he adds, isn't this a poor introduction to such a fascinating type of literature?

Well, now actually we don't think so, for all our own feeling that modern stories are better. We've had our fun introducing stf to new people who'd heard all the furore and wanted to sample it. And invariably, whenever we tried them out on one of the modern, highly sophisticated jobs it floored them. Stf has come so far that it is almost a new language to the uninitiated. And the complexity of ideas is stunning to the new reader. His introduction will be much easier if he starts, as science-fiction started—at the beginning.

With all his objections, Jan submits that FANTASTIC has chosen its novels with excellent judgment and offers the following list:

1. THE HIDDEN WORLD—Hamilton; Spring '50
2. EXILE OF THE SKIES—Vaughn; Summer '50
3. IN CAVERNS BELOW—Coblentz; Fall '50
4. VANDALS OF THE VOID—Walsh; Spring '51
5. THE CONQUERORS—Keller; Summer '51

Only one novel has been omitted from this list; therefore we get a score of five out of six, which isn't bad, which Jan himself characterizes as way above par for any mag, reprint or otherwise. Higher praise hath no mag.

Then comes the chaser—the short stories don't fare so well. "Up to (and including) the Summer '51 issue, you ran a total of 26 shorts. Of these 26, I would say only 4 approached the quality of current stories." Then follows a list of stories we are presumably urged to run:

CITIES IN THE AIR—Hamilton
DAWN OF FLAME—Weinbaum
TIDAL MOON—Weinbaum
TIME STREAM—Taine

What a quincydince. We'd been thinking about a Weinbaum issue for some time and sure enough, this forthcoming Spring issue will bring DAWN OF FLAME and THE BLACK FLAME, which go together logically anyway.

You'll remember that DAWN OF FLAME is a short novelet introducing THE BLACK FLAME and her brother and setting the stage for their plans of conquest. THE BLACK FLAME is a long novel which deals more thoroughly with that tempestuous lady. Written in Weinbaum's most fluent style, this is the sort of stf adventure-romance which always stands up over the years because of the universality of its plot ideas. Not the technical type of stf story, it is perhaps more durable because of that very thing. Anyway, if even the critical Romanoff approves of the Flame stories, the rest of you should certainly get a bang out of them.

We'll see you then, in the Spring issue.

—*The Editor*

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